

Ian Gordon



Ian Gordon, Teaching & Learning Librarian



Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

Health Sciences

WELCOME

ARTICLES

BOOKS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?



Contact us at libhelp@brocku.ca or find more library help on our Research Support page.



What is this guide for?

This guide has been designed as a general program guide and is curated by Brock librarians. It features links to most often used resources such as databases for books, peer-reviewed journal articles, theses, dissertations, open educational resources (OEDs), patents, standards, and more. Use the tabs on the left to navigate through the web page.

Selective course-related guides are provided when appropriate every term.

HLSC Library Seminar: Literature Reviews: Strategies and Resources to be Successful! (June 2023) ppt slides (PDF) & video.

Doing a Literature Review in Health and Social Care: A Practical Guide (2023)

HLSC 2P00 Library Seminar ppt slides (PDF)

HLSC/CHYS 3P80 Fall 2023 Evidence Synthesis Library Seminar ppt slides (PDF) & video.



Attribution

Creative Commons License

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.



LIBRARY MODULES

There are two Library Modules to be completed on *Brightspace*:

- Module 1 deals with how to develop a research topic. It includes the development of a 150-200 word proposed research project for your final paper – a rapid-review literature review (see Writing Assignments below. Fourther details will be provided in class).
- 2) Module 2 will review interactive learning modules on library literature searching, covering topics such as peer review, scholarly sources, developing a systematic search strategy, and finding articles in OMNI and other search engines. The second module includes a series of multiple-choice quiz questions to assess library literature searching skills.

Both modules must be completed before their assigned deadlines or students will receive a mark of zero (0). As you have multiple weeks to complete these assignments, there will be no allowance made for late/missed modules for any reason including medical, religious, or academic accommodations.

Annotated Bibliography

Students are to submit a brief annotated bibliography prior to their final paper. The purpose of the annotated bibliography is to ensure progress in your major term paper (rapid review) and ensure you have found an adequate number of sources and that the selected articles are relevant and appropriate for your final paper topic. Include an introduction based on your Library Module 1 proposed research project and research question. This will guide the inclusion and discussion of the relevant articles in this assignment. Annotations should be brief summaries of the article (~2-4 sentences). Students will summarize (in their own words) each study's main objective (e.g., research questions), method/sample, main finding(s), and key limitations/strengths. Students should also include a sentence regarding the relevance of each article to the topic and why it was included (if unclear). Late papers will be penalized at 10% per day (each 24 hour period). Students are required to submit their papers to Turnitin.com, phrase-matching software. If you object to uploading your assignments to Turnitin.com for any reason, please notify the instructor in advance to discuss alternatives. The assignment must be submitted through Brightspace - no exceptions. (see Section 5 below). As you have multiple weeks to complete this assignment, there will be no allowance made for late/missed modules for any reason including medical, religious, or academic accommodations.

Help with writing annotated bibliographies:

<u>Annotated Bibliographies</u> (Brock Library Digital Learning object) https://brocktnl.github.io/annotated-bibliographies/

Writing the Annotated Bibliography: A Guide for Students & Researchers (Brock Library ebook, 2020)

<u>Tips for Writing an Annotated Bibliography</u> (Comm Library)

https://libguides.com.edu/annotated

Writing an Annotated Bibliography (UofT Writing Advice)
https://advice.writing.utoronto.ca/types-of-writing/annotated-bibliography/

A Short Guide to Annotated Bibliographies (YouTube, Ontario Tech University, 3:42)

https://www.youtube.com/watch?v=yAgmmJV3RIU

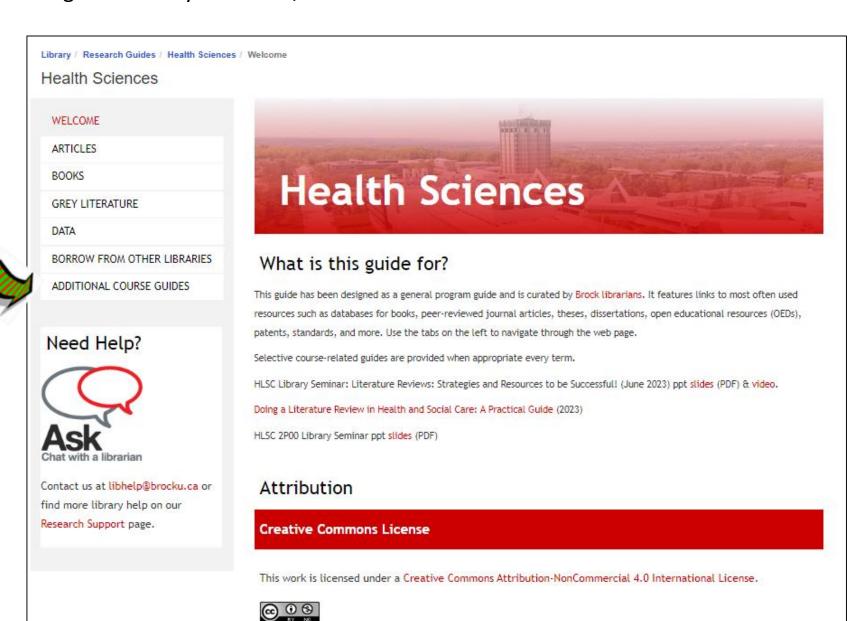
Write an Annotated Bibliography (Guelph Library)

https://guides.lib.uoguelph.ca/AnnotatedBibliography

Annotated Bibliographies (UNC Chapel Hill)

https://writingcenter.unc.edu/tips-and-tools/annotated-bibliographies/

https://researchguides.library.brocku.ca/HLSC



Library / Research Guides / Health Sciences / Additional Course Guides

Health Sciences

WELCOME

ARTICLES

BOOKS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?



Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Additional Course Guides

HLSC/CHYS 3P80 resources

HLSC/CHYS 3P80 Fall 2023 Evidence Synthesis Library Seminar ppt slides (PDF) & video.

Annotated bibliography resources:

Annotated Bibliographies (Brock Library Digital Learning object)

Writing the Annotated Bibliography: A Guide for Students & Researchers (Brock Library ebook, 2020)

Tips for Writing an Annotated Bibliography (Comm Library)

Writing an Annotated Bibliography (UofT Writing Advice)

A Short Guide to Annotated Bibliographies (YouTube, Ontario Tech University, 3:42)

Write an Annotated Bibliography (Guelph Library)

Annotated Bibliographies (UNC Chapel Hill)

Rapid review resources:

PRISMA Checklists http://prisma-statement.org/

What are Rapid Reviews? (University of Toronto Library)

Systematic, scoping, and rapid reviews: An overview (Simon Fraser University Library)

Rapid Review Resources (PDF, McMaster Health Forum)

Rapid Review Guidebook: Steps for Conducting a Rapid Review (PDF, NCCMT)



Final Student Paper

The final paper will (most likely) be based on your research proposal and annotated bibliography and will be an individual effort (and, as such, independence of work is expected). The final paper will be based on a <u>rapid review</u> style of the literature following the PRISMA guidelines. Requirements for the paper will be discussed further as we progress through the course. Students are required to submit their papers to Turnitin.com, phrase-matching software. If you object to uploading your assignments to Turnitin.com for any reason, please notify the instructor in advance to discuss alternatives. The paper must be submitted through **Brightspace** – no exceptions. Late papers will be penalized at 10% per day (each 24 hour period). Students are expected to follow all guidelines for proper citations, referencing, etc. consistent with meeting academic integrity (see Section 5 below). As you have multiple weeks to complete this assignment, there will be no allowance made for late/missed modules for any reason including medical, religious, or academic accommodations.

Is ADHD associated with increased risk of obesity in children?

Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

Top 10 resources you should know about!

- 1. zoterobib citation citing https://zbib.org/
- 2. Zotero citation management software https://www.zotero.org/
- 3. Rapid reviews' protocols, frameworks and reporting guidelines
- 4. Scholarly databases to include MEDLINE via OVID, via PubMed, via Web of Science Complete
- 5. MeSH (Medical Subject Headings) How do they work?
- 6. Alternate scholarly databases
- 7. Covidence database evidence synthesis screening
- 8. Documenting findings using PRISMA reporting guidelines and references
- 9. When, where and how to get help!
- 10. How to book a consultation

Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

This Course: HLSC/CHYS 3P80 Child Health

Course Calendar Description:

Exploration of the biological, psychological & sociological determinants of children's health.

Additional Description:

This course will examine health and development issues among children in Canada.

It will take a complementary biopsychosocial perspective to explore both the physical and mental health aspects of children from infancy through a lolescence and early adulthood.

The main goal of the course is to introduce students to a broad way of thinking about child health, integrating the biomedical model and the biopsychosocial model to critically evaluate current policies and perceptions of health and health services.

What is evidence synthesis?

EVIDENCE SYNTHESIS

- Synthesized evidence is considered:
 - ·less biased
 - more rigorous
 - more generalizable
- Hierarchy of pre-processed evidence

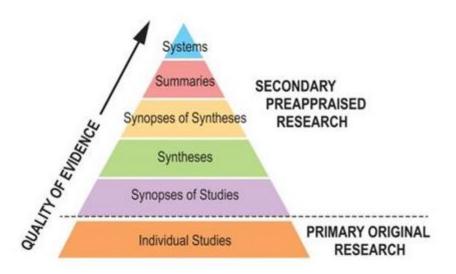


Image: https://libguides.lib.umanitoba.ca/c.php?g=297452&p=4467117



Image: Duke University Library https://guides.mclibrary.duke.edu/ebm/home

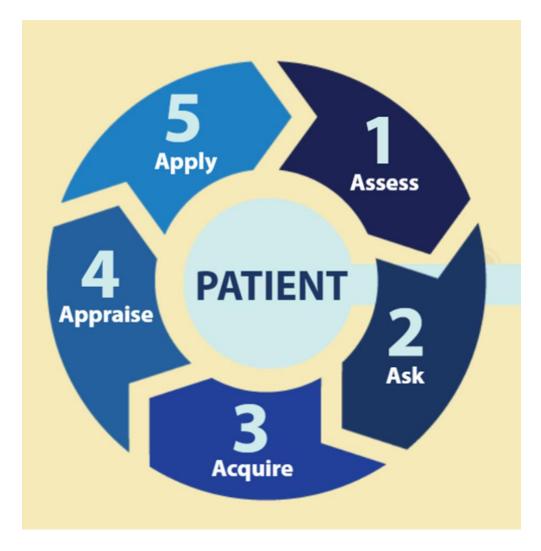


Image: Duke University Library https://guides.mclibrary.duke.edu/ebm/home

STEPS IN EVIDENCE SYNTHESIS

Evidence synthesis generally involves these steps:

- Stating the objectives of the research
- Defining eligibility criteria for studies to be included and excluded
- Identifying (all) potentially eligible studies
- Screening for inclusion and exclusion
- Extracting data from the final set of screened studies
- Appraising the final set of studies
- Applying statistical analysis, if applicable
- Preparing a structured report of the research

Traditional Reviews

- · Critical Review
- Integrative Review
- · Narrative Review
- . State of the Art Review

Review of Reviews

- Umbrella Review
- Review of Reviews

Systematic Reviews

- · Systematic Review
- Meta-analysis
- Comparative Effectiveness Review
- · Diagnostic Systematic Review
- · Network Meta-analysis
- · Prognostic Review
- · Psychometric Review
- · Review of Economic **Evaluations**
- SR of Epidemiology Studies

Rapid Reviews

- Rapid Review
- · Rapid Evidence Assessment
- · Rapid Realist Review

Qualitative Reviews

- Q Evidence Synthesis
- Q Interpretive Meta-synthesis
 Meta-Narrative Review
- Q Meta synthesis
- Framework Synthesis
- Meta aggregation

- Meta ethnography
- Meta-interpretation
- Meta-study
- Meta-summary
- Thematic Synthesis

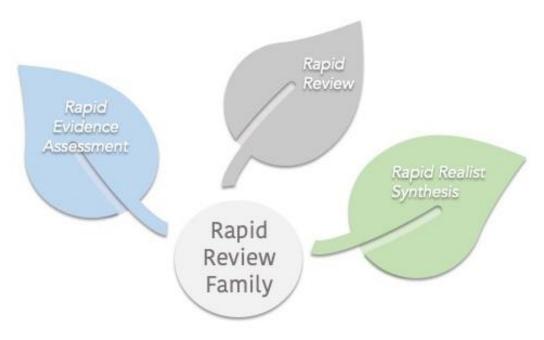
Mixed Method Reviews

- Mixed Methods Synthesis
- Narrative Synthesis
- · Meta-narrative Review
- · Bayesian Meta -analysis
- · EPPI Centre Review
- Critical Interpretive Synthesis
- Realist Synthesis

Purpose Specific Reviews

- · Scoping Review
- · Mapping Review
- · Systematised Review
- · Concept Synthesis
- · Expert Opinion Policy Review
- Technology Assessment Review
- · Methodological Review
- · Systematic Search and Review

Review **Families** Reviews that are grouped within this family due to the abbreviated approach to the typical review methodology processes. This may include the search, appraisal and reporting so that the review is completed in a time-efficient manner to fit within project deadlines. (Moher et al., 2015).



WHY ARE THEY MORE RAPID?

"a type of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a short period of time.."

May use:

- Very narrow research question
- Less sophisticated search strategies
- Search fewer sources
- Simple, descriptive quality appraisal



Research Question

Rapid Review





Rapid review resources:

PRISMA Checklists

http://prisma-statement.org/

What are Rapid Reviews? (University of Toronto Library)

https://guides.library.utoronto.ca/c.php?g=713309&p=5083943

Systematic, scoping, and rapid reviews: An overview (Simon Fraser University Library)

https://www.lib.sfu.ca/about/branches-depts/rc/writing-theses/writing/literature-reviews/systematic-scoping-rapid-reviews

Rapid Review Resources (PDF, McMaster Health Forum)

https://www.mcmasterforum.org/docs/default-source/covidend/spor-resources/sporea rapid-review-guidance-resources.pdf?sfvrsn=1bfb59d5 5

Rapid Review Guidebook: Steps for Conducting a Rapid Review (PDF, NCCMT)

https://www.nccmt.ca/uploads/media/0001/01/a816af720e4d587e13da6bb307df8c907a5dff9a.pdf

Library / Research Guides / Health Sciences / Additional Course Guides

Health Sciences

WELCOME

ARTICLES

BOOKS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?



Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Additional Course Guides

HLSC/CHYS 3P80 resources

HLSC/CHYS 3P80 Fall 2023 Evidence Synthesis Library Seminar ppt slides (PDF) & video.

Annotated bibliography resources:

Annotated Bibliographies (Brock Library Digital Learning object)

Writing the Annotated Bibliography: A Guide for Students & Researchers (Brock Library ebook, 2020)

Tips for Writing an Annotated Bibliography (Comm Library)

Writing an Annotated Bibliography (UofT Writing Advice)

A Short Guide to Annotated Bibliographies (YouTube, Ontario Tech University, 3:42)

Write an Annotated Bibliography (Guelph Library)

Annotated Bibliographies (UNC Chapel Hill)

Rapid review resources:

PRISMA Checklists http://prisma-statement.org/

What are Rapid Reviews? (University of Toronto Library)

Systematic, scoping, and rapid reviews: An overview (Simon Fraser University Library)

Rapid Review Resources (PDF, McMaster Health Forum)

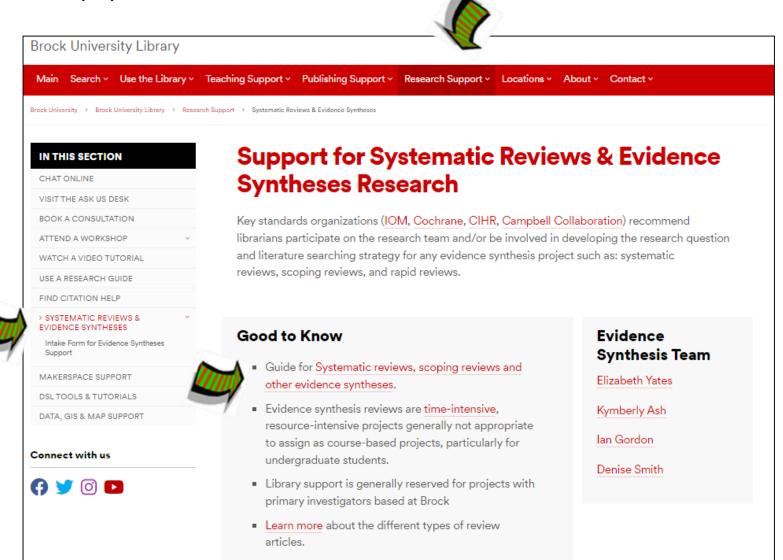
Rapid Review Guidebook: Steps for Conducting a Rapid Review (PDF, NCCMT)



Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

https://brocku.ca/library/systematic-reviews/



Systematic reviews, scoping reviews and other evidence syntheses

Overview of evidence synthesis reviews and relevant strategies, tools and resources.

WELCOME

EVIDENCE SYNTHESIS: OVERVIEW

BEFORE YOU START

SYSTEMATIC REVIEWS

SCOPING REVIEWS

DEVELOP A RESEARCH QUESTION

WRITE A PROTOCOL

CONTRACTOR NATIONAL SECTION

DEVELOP A SEARCH STRATEGY

DOCUMENTING & REPORTING

YOUR SEARCH

MANAGE CITATIONS

SCREENING RESULTS

EXTRACTING DATA & ASSESSING

QUALITY

REPORTING RESULTS

Welcome



What is this guide for?

Welcome to the research guide for Evidence Synthesis.

Use this guide to get oriented to the best practices and resources for conducting evidence synthesis research, including systematic and scoping reviews.

The Library's team of evidence synthesis experts is happy to help!







Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

https://researchguides.library.brocku.ca/

Library / Research Guides / Health Sciences / Articles **Health Sciences** WELCOME ARTICLES BOOKS GREY LITERATURE DATA BORROW FROM OTHER LIBRARIES ADDITIONAL COURSE GUIDES Need Help? Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Articles

Journal articles are scholarly works that go through a quality control process called peer-review before they are published.

MEDLINE is available via OVID, PubMed, SciFInder-n and Web of Science Complete. Utilize MED . MEDLINE - via OVID @ Headings) which is the NLM controlled vocabulary thesaurus. Note that the Web of Science Co Science Core Collection, BIOSIS and more...

Several databases provide access to regional, national and international news articles.

A select list of databases that include scholarly articles are listed below.

- - Find Peer-reviewed papers, theses, books, abstracts and articles, from ac societies, repositories, universities and other scholarly organizations
 - o Off-Campus access to Brock resources is available to users who configure follows:
 - 1. Click on Scholar Settings
 - 2. Select 'Library links' from the left menu
 - 3. Type Brock in the Library links box, and click the search icon
 - 4. Select Brock in the resulting list
 - 5. Click on the 'Save' button
 - 6. Follow the Find it @ Brock links to access available full-text.
- Web of Science Core Collection @
 - · Scholarly resources across all disciplines
 - · Access to Cited Reference searching
 - Permitted Uses

more info...

- - o International literature on biomedicine, allied health fields and biological and physical sciences, humanities, and information science as they relate to medicine and health care.
 - o Coverage: 1946-current
 - Permitted Uses

more info...

- Embase ☑
 - Comprehensive biomedical database including more than 30 million records from more than 8,500 journals.
 - Notable coverage of drug and pharmaceutical research, pharmacology and toxicology as well as robust international content.
 - o Coverage: 1974-current
 - Permitted Uses
- CINAHL Complete @
 - · Cumulative Index to Nursing and Allied Health Literature
 - Covers nursing, allied health, alternative therapies, biomedicine, consumer health, and health administration.
 - Coverage: 1937-present
 - Permitted Uses

more info...

- PsycINFO @
 - · All subjects of psychology and behavioural sciences
 - o Find scholarly journal articles, books, book chapters, theses, dissertations and reports
 - Includes PsycARTICLES and PsycBOOKS.
 - Permitted Uses

more info...

https://researchguides.library.brocku.ca/



Library / Research Guides / Child and Youth Studies / Articles

Child and Youth Studies

DATA, STATS & GOV DOCS

Contact us at libhelp@brocku.ca or

find more library help on our

Research Support page.

COURSE GUIDES

Need Help?

Recommended resources for finding research in the field of child and youth Studies



Journal Articles

Top 5 recommended subject databases for finding journal articles in the field of Child and Youth Studies.

- ProQuest Sociology Collection @
 - · All aspects of sociology and social work
 - Includes ProQuest Sociology Database, Sociological Abstracts, and Applied Social Sciences Index & Abstracts
 - Permitted Uses

more info...

- PsycINFO ☑
 - · All subjects of psychology and behavioural sciences
 - o Find scholarly journal articles, books, book chapters, theses, dissertations and reports
 - · Includes PsycARTICLES and PsycBOOKS.
 - Permitted Uses

more info...

- Education Source @
 - · All levels of education from early childhood to higher education, as well as educational specialties
 - o Find scholarly journal articles, books, conference papers and ERIC documents
 - o Coverage: 1929-current
 - Permitted Uses

more info..

- ERIC ☑
 - · The U.S. national database of education literature
 - · Covers all aspects of education
 - · 2 collections: Resources in Education for document literature (conference papers, books, research reports, dissertations), and Current Index to Journals in Education (published journal literature)
 - o Coverage: 1966-present
 - Permitted Uses

more info...

Recommended Scholarly Databases:

HLSC

Google Scholar

Web of Science Core Collection Web of Science Complete (which Includes Web of Science Core Collection, MEDLINE and other databases...) Embase

MEDLINE via OVID CINAHL Complete PsycINFO

CHYS

ProQuest Sociology Collection
PsycINFO
Education Source
ERIC

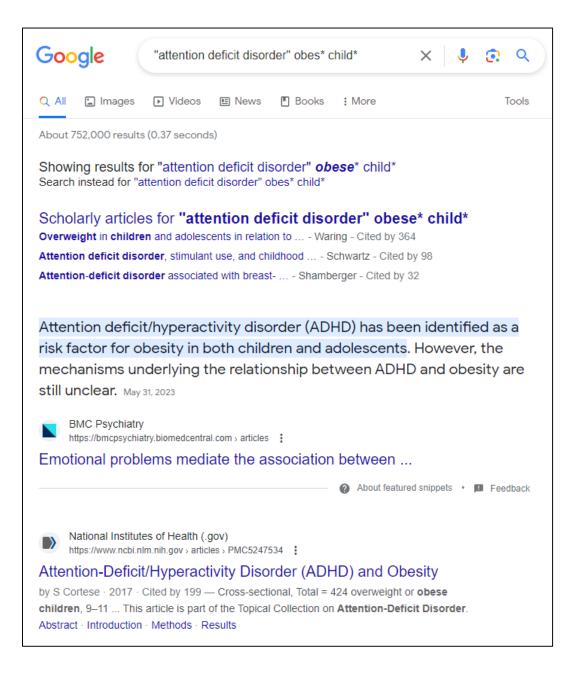
Is ADHD associated with increased risk of obesity in children?

Library Seminar Agenda

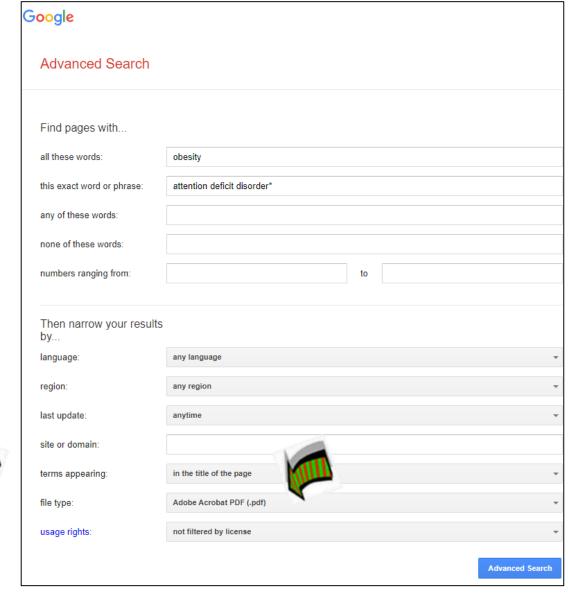
- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

Academic Search Complete, AgeLine, BASE, BioOne Complete, bioRxiv, CINAHL Cochrane, Complete, CORE, Dimensions, Directory of Open Access Journals (DOAJ), Education Source, Elicit, Embase, ERIC, figshare, Gender Studies Database, Google, Advanced Google, Google Books, Google Scholar, MEDLINE via PubMed, MEDLINE via OVID, MEDLINE via Web of Science Complete, Omni, Open Alex, ORCiD, OSF Preprints, Oxford Reference, Paperity, PLOS, Politics Collection, ProQuest Sociology Collection, Prospero, PsycINFO, ResearchGate, ResearchRabbit, Scholars Portal E-Journals, SciELO, Scite, Scilit, Scopus, Semantic Scholar, Sport Discus, The Lens, Web of Science Core Collection, WorldWideScience.org, WorldCat, Zenodo...

https://www.google.ca/



https://www.google.ca/advanced_search







ADHD as a risk factor for obesity. Current state of research

by T Hanć · 2018 · Cited by 21 — Summary. Obesity is now a major health concern in both children and adults. According to research from the past 15 years, one of the factors that...



Prevalence of Overweight and Obesity in Children and ...

by E Racicka · 2018 · Cited by 55 — Introduction. Association between ADHD and overweight/obesity has been a research topic over the last three decades. The results.



Does Overweight/Obesity Moderate the Association ...

by B Badripersaud · 2020 · Cited by 3 — Note. Depression, Anxiety, and Stress measured using the Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995). Low Depression,...



What is the relationship between ADHD and obesity / eating ...

Adults with ADHD have unhealthy eating habits, leading to overweight/obesity, with the odds ratio increasing with age. They are also suffering more from ...



Attention-Deficit/Hyperactivity Disorder (ADHD) and Obesity

by S Cortese · 2008 · Cited by 361 — Recent studies suggest a possible comorbidity between Attention-Deficit/Hyperactivity Disorder (ADHD) and obesity. To gain insight into this potential ...

https://brocku.ca/library/





\equiv	Google Scholar	ADHD obesity child*					
•	Articles	About 54,400 results (0.08 sec)					
	Any time Since 2023 Since 2022 Since 2019 Custom range	Obesity in men with childhood ADHD: a 33-year controlled, prospective, follow-up study S Cortese, MA Ramos Olazagasti, RG Klein, 2013 - publications.aap.org BMI and obesity rates in men with childhood ADHD versus those without childhood ADHD, We also hypothesized that BMI and obesity rates would be significantly greater in men with ☆ Save 𝔊𝔞 Cite Cited by 156 Related articles All 14 versions Web of Science: 80 ≫	[HTML] nih.gov				
	Sort by relevance Sort by date	Comorbidity between ADHD and obesity : exploring shared mechanisms and clinical implications <u>S Cortese</u> , CM Peñalver - Postgraduate medicine, 2010 - Taylor & Francis	[PDF] tandfonline.com Find it @ Brock				
	Any type Review articles	ADHD in patients with obesity and to look for abnormal eating behaviors as possible contributing factors of obesity in patients with ADHD Obesity in childhood has been reported to be					
	include patents✓ include citations	☆ Save ፡፡ Size Cited by 110 Related articles All 4 versions Web of Science: 66 Obesity and ADHD: clinical and neurobiological implications	[PDF] researchgate.net				
	☑ Create alert	S Cortese, B Vincenzi of attention deficit hyperactivity disorder and its, 2012 - Springer in children aged 5–14 years is challenging because there is not a standard definition of childhood obesity applied worldwide. WHO is currently developing an international growth ☆ Save 55 Cite Cited by 217 Related articles All 12 versions ≫					
		Association between ADHD and obesity : a systematic review and meta-analysis <u>S Cortese</u> , CR Moreira-Maia American journal of, 2016 - Am Psychiatric Assoc (50) concluded that childhood ADHD symptoms predicted subsequent obesity , rather than men with a childhood diagnosis of ADHD had a twofold higher rate of obesity compared with $\preceip S$ Save $\preceip S$ Cite Cited by 555 Related articles All 8 versions Web of Science: 311	[HTML] psychiatryonline.org				

Recommended Scholarly Databases:

HLSC

Google Scholar
Web of Science Core Collection
Web of Science Complete (which
Includes Web of Science Core Collection,
MEDLINE and other databases...)
Embase
MEDLINE via OVID
CINAHL Complete
PsycINFO

CHYS

ProQuest Sociology Collection
PsycINFO
Education Source
ERIC

Evidence synthesis

Web of Science Complete

MEDLINE

Embase

Google Scholar

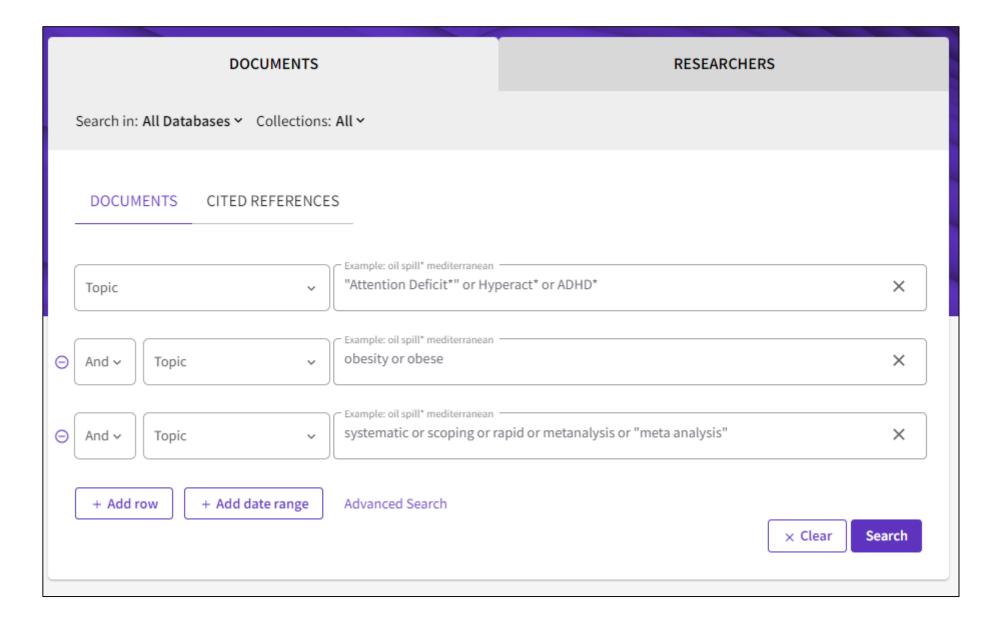
Cochrane

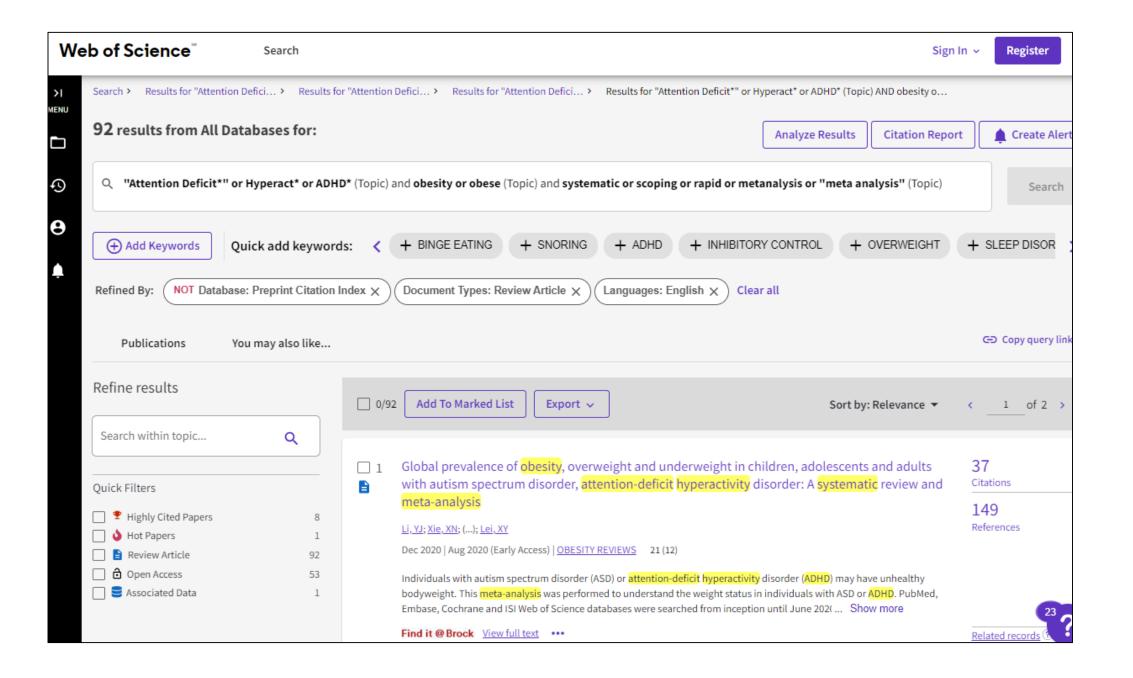
OSF Preprints

Prospero

Scopus

First: Look for an evidence synthesis resources on your research question or topic





The Impact of COVID-19 School Closure on Child and Adolescent Health: A Rapid Systematic Review

By Chaabane, S (Chaabane, Sonia) [1]; Doraiswamy, S (Doraiswamy, Sathyanarayanan) [1]; Chaabna, K (Chaabna,

Karima) [1]; Mamtani, R (Mamtani, Ravinder) [1]; Cheema, S (Cheema, Sohaila) [1]

View Web of Science ResearcherID and ORCID (provided by Clarivate)

Source CHILDREN-BASEL

Volume: 8 Issue: 5

DOI: 10.3390/children8050415

Article Number 415

Published MAY 2021

Indexed 2021-06-01

Document Type Review

Abstract School closures during pandemics raise important concerns for children and adolescents. Our aim is synthesizing

available data on the impact of school closure during the coronavirus disease 2019 (COVID-19) pandemic on child and adolescent health globally. We conducted a rapid systematic review by searching PubMed, Embase, and Google Scholar for any study published between January and September 2020. We included a total of ten primary studies. COVID-19-related school closure was associated with a significant decline in the number of hospital admissions and pediatric emergency department visits. However, a number of children and adolescents lost access to school-based healthcare services, special services for children with disabilities, and nutrition programs. A greater risk of widening

Citation Network

In All Databases

92 Citations

Highly Cited Paper

♠ Create citation alert

92 Times Cited in All Databases

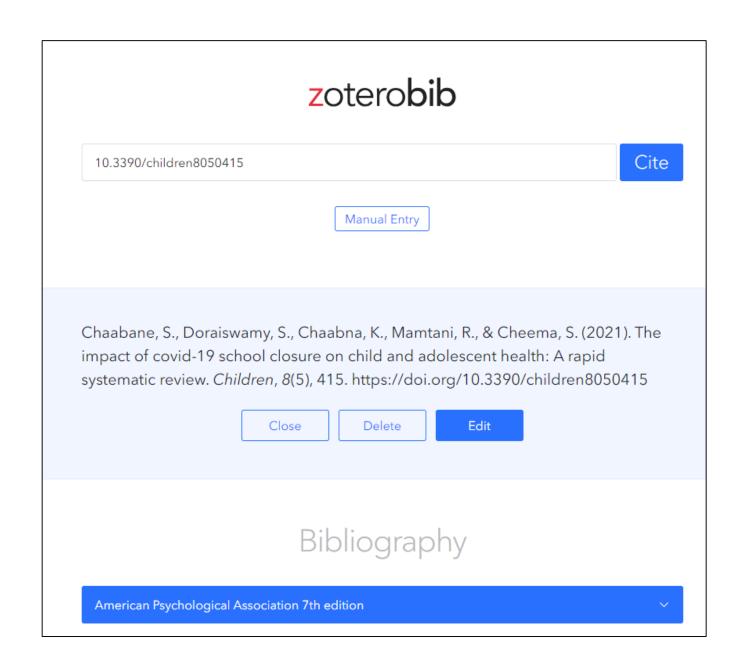
+ See more times cited

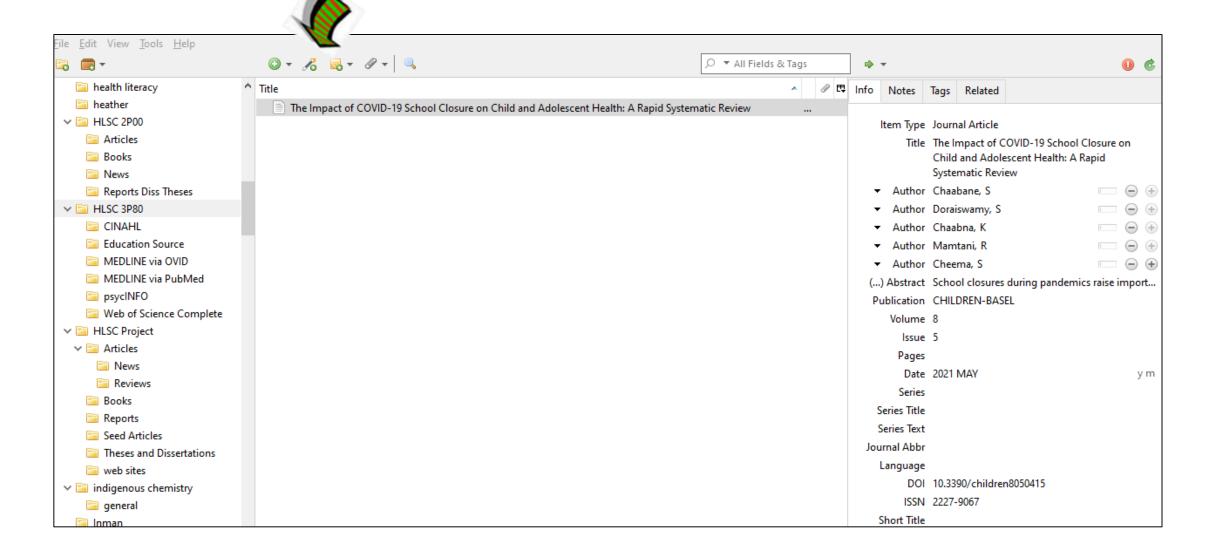
∀iew citing preprints

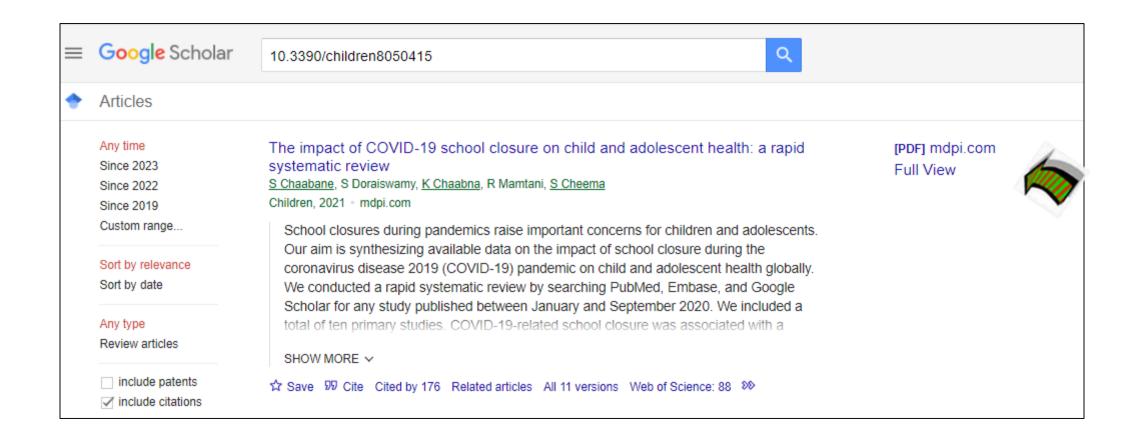
50 Cited References
View Related Records →

Citing items by classificati New

Breakdown of how this article has been mentioned, based on available citation context data and snippets from 51 citing item(s).







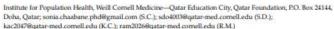




Review

The Impact of COVID-19 School Closure on Child and Adolescent Health: A Rapid Systematic Review

Sonia Chaabane, Sathyanarayanan Doraiswamy 🗓, Karima Chaabna 🗓, Ravinder Mamtani and Sohaila Cheema 👊



Correspondence: soc2005@qatar-med.cornell.edu; Tel.: +974-44928503; Fax: +974-44928333

Abstract: School closures during pandemics raise important concerns for children and adolescents. Our aim is synthesizing available data on the impact of school closure during the coronavirus disease 2019 (COVID-19) pandemic on child and adolescent health globally. We conducted a rapid systematic review by searching PubMed, Embase, and Google Scholar for any study published between January and September 2020. We included a total of ten primary studies. COVID-19-related school closure was associated with a significant decline in the number of hospital admissions and pediatric emergency department visits. However, a number of children and adolescents lost access to school-based healthcare services, special services for children with disabilities, and nutrition programs. A greater risk of widening educational disparities due to lack of support and resources for remote learning were also reported among poorer families and children with disabilities. School closure also contributed to increased anxiety and loneliness in young people and child stress, sadness, frustration, indiscipline, and hyperactivity. The longer the duration of school closure and reduction of daily physical activity, the higher was the predicted increase of Body Mass Index and childhood obesity prevalence. There is a need to identify children and adolescents at higher risk of learning and mental health impairments and support them during school closures.

Keywords: school closure; rapid systematic review; COVID-19; child and adolescent health

1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic has affected primary and secondary schooling worldwide. Temporary closure of over 90% of schools worldwide has been reported since March 2020 to mitigate the spread of COVID-19 [1]. This has impacted over 1.5 billion students globally [1]. School closures are driven by physical distancing policies derived from previous models of influenza outbreaks in which children are a vulnerable group for morbidity and play a major role in the spread of the infection [2–4]. However, available data for COVID-19 indicates that children (less than 18 years of age) and adolescents (10–19 years) are less susceptible to it than older adults [5], do not appear to significantly drive transmission [6], are a small fraction of the total COVID-19 cases, and have reduced vulnerability to complications as compared to adults [7,8].

In addition to providing knowledge and skills, schools offer an appropriate environment to promote healthy functioning and well-being among children and adolescents; they provide an ideal setting for students to acquire social and emotional skills, as well as behaviors that translate into positive real-life health outcomes [9,10]. Additionally, schools are considered an essential setting for children's physical activity [11,12]. For children and adolescents with special educational or mental health needs, schools are critical, and in some cases, the only provider of resources that they depend on [13]. School routines also serve as important coping mechanisms for young people with mental health issues [14]. Furthermore, in some middle-income countries, such as Thailand, approximately 60%



Citation: Chaabane, S.; Doraiswamy, S.; Chaabna, K.; Mamtani, R.; Cheema, S. The Impact of COVID-19 School Closure on Child and Adolescent Health: A Rapid Systematic Review. Children 2021, 8, 415. https://doi.org/10.3390/children8050415

Academic Editor: H. Lester Kirchner

Received: 7 April 2021 Accepted: 12 May 2021 Published: 19 May 2021

Publisher's Note: MDPI stays neutral with segard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Based, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/

2. Materials and Methods

We conducted a rapid systematic review following the Cochrane guideline for rapid reviews [29]. The protocol was registered in the Open Science Framework and is available at https://osf.io/n294h (accessed on 16 September 2020). In this review, we synthesize available data on the impact of school closure during the COVID-19 pandemic on child and adolescent health.

2.1. Search Strategy and Selection Criteria

A broad search strategy was developed to systematically identify studies on the impact of school closure during the ongoing COVID-19 pandemic on child and adolescent health using keywords and controlled vocabulary. Search terms related to the school/kindergarten/nursery closure and COVID-19 were used. We systematically searched PubMed, Embase, and Google Scholar for grey and non-grey literature between 1 January and 2 September 2020. No restrictions to a specific health condition or language of publication were applied at this stage.

Guidelines for conducting rapid systematic reviews involves a search with at least two literature search strategies limited to the English language [29]. For a comprehensive search, we included three search strategies (for the three databases respectively) and did not apply any language restrictions. For searching primary studies in rapid systematic reviews, it is particularly recommended to search PubMed and Embase databases [29]. It has been suggested that searching PubMed alone, as a proxy to Medline provides sufficient coverage for reviews [30]. Embase serves as a complement to PubMed and is known to produce unique references along with coverage of European and Asian journals [31]. Some evidence has shown that Google Scholar searches often identify different articles than

2.2. Inclusion and Exclusion Criteria

We included all types of studies reporting the impact of COVID-19 school closure on child and adolescent health. We considered school closure when reported in isolation as well as combined with other preventive measures, such as physical distancing, lockdown, and restriction on mass gatherings. Studies published in Arabic, English, French, and/or Urdu (languages spoken by the authors) were eligible to be included. We included quantitative and qualitative primary data on children and adolescents (attending kindergarten, primary, middle, and high schools). We excluded reviews, studies in university settings, and studies examining the indirect impact of school closure such as the impact on COVID-19 transmission, incidence, or mortality, and impact on the parents' health.

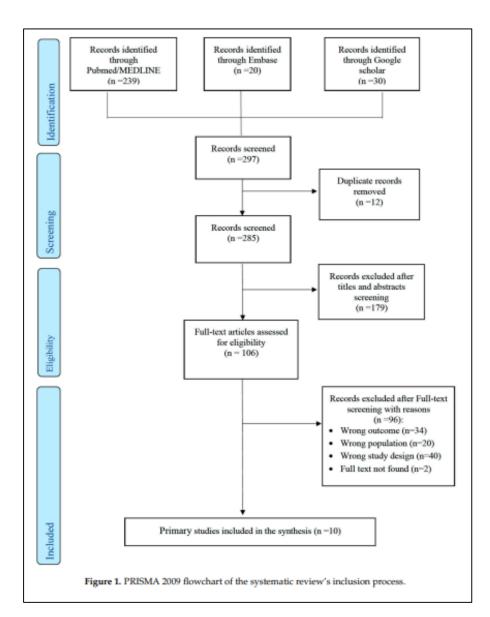


Table 1. Characteristics of the included primary studies on the impact of school closure on child and adolescent health.									
Publication Country Data Source	Study Design/Analysis	Population Characteristics	Types of Interventions Duration of School Closure	Outcomes	Findings				
		Children in kindergarten class of 2010-2011 (n = 15,631) were followed from kindergarten through 5th grade 6-10 years	Scenario 1: 2-month nationwide school closure (April and May 2020) with COVID-19 vs. 2-months nationwide school closure in April and May 2020 without COVID-19	Increase in the body mass index z-scores Childhood obesity prevalence	An increase in the mean BMIz by 0.056 unit An increase in childhood obesity prevalence by 0.640 percentage points				
An, R., 2020 [38]			Scenario 2: Scenario 1 + 10% reduction in daily physical activity in the summer from June to August	Increase in the body mass index z-scores Childhood obesity prevalence	An increase in the mean BMIz by 0.084 An increase in childhood obesity prevalence by 0.972 percentage points				
USA Early Childhood Longitudinal Study	Microsimulation model		Scenario 3: Scenario 2 + 2-month school closure in September and October; November and December	Increase in the body mass index z-scores Childhood obesity prevalence	An increase in the mean BMIz by 0.141 units An increase in childhood obesity prevalence by 1.676 percentage points				
			Scenario 4: Scenario 3 + 2-month school closure in November and December	Increase in the body mass index z-scores Childhood obesity prevalence	An increase in the mean BMIz by 0.198 units An increase in childhood obesity prevalence by 2.373 percentage points				
			Comparison of the control scenario without the COVID-19 pandemic and the 4 alternative scenarios with COVID-19	Childhood obesity (BMIz in the 95th percentile or higher in the growth chart)	"Compared to girls and non-Hispanic whites and Asians, the impact of COVID-19 on childhood obesity was modestly larger among boys and non-Hispanic blacks and Hispanics, prespectively."				

4. Discussion

This rapid systematic review identified a total of ten studies reporting both positive and negative impact of the COVID-19 school closure on child and adolescent mental and physical health as well as on accessibility issues related to learning, school-based healthcare services, nutrition, and dedicated services for special groups.

Our results suggest that the COVID-19 school closure made several critical services inaccessible for children and adolescents—school-based healthcare services, essential resources programs for children with disabilities (engagement with specialized educators and structured learning environments), and school and childcare-based nutrition programs providing food to underprivileged children. A positive impact of COVID-19 school closure on child and adolescent health includes a significant decline in the number of hospital admissions and pediatric emergency department visits. Though there was a decline in the number of maltreatment reports for children, it is unclear if this is due to a reduction in the maltreatment incidence or due to decreased reporting. COVID-19-related school closure negatively impacted child and adolescent mental (e.g., anxiety, loneliness, sadness, frustration) and physical (e.g., increased BMI) health morbidity.

A greater risk of widening educational disparities due to the lack of support caused by the limited availability of parents and resources for remote learning was reported among poorer families and among children with disabilities. School closure also contributed to increased anxiety among children and loneliness in young people along with a significant increase in child stress, sadness, frustration, indiscipline, and hyperactivity. Although children's sleep timings were greatly altered during the lockdown, their sleep quality was, in general, not impacted. An alteration or breakdown in daily routines for youth was also reported. Suicide rates among children and adolescents during COVID-19-related school

5. Conclusions

Findings from our rapid review suggests that the impact of school closures during the COVID-19 pandemic includes loss of access to school-based and critical services and resources particularly for children with disabilities and those living in poorer families. COVID-19 school closures were also associated with increased stress among children and emotional reactions (e.g., sadness, frustration, indiscipline) in addition to the breakdown in daily routines. The longer the duration of school closure and the daily reduction in physical activity, the higher the predicted increase of the BMI and childhood obesity prevalence. Concerns about children and adolescents' ability to learn during pandemic related school closures needs further follow-up and special consideration in future research and evaluation studies. Harms of school closure on child and adolescent health seem to exceed some indicators of positive health care system effects. It would be helpful to assess other health and social effects—such as the quality of life of children and their families, lifestyle, screen time, education/learning, cognitive development, social interactions including social media use-resulting from school closures. Custom tailored benefit and risk assessments specific to the local socioeconomic context, health system, and school resources are essential when considering school closures.

Supplementary Materials: The following are available online at https://www.mdpi.com/article/10 .3390/children8050415/s1. Table S1. The 2009 PRISMA checklist for reporting a systematic review. Panel 1: Search Strategy.

Author Contributions: S.C. (Sonia Chaabane), K.C., S.D., R.M., and S.C. (Sohaila Cheema) collectively contributed to the conception of the study. S.C. (Sonia Chaabane), K.C., S.D., and S.C. (Sohaila Cheema) were involved in the literature search, screening, and extraction steps. Analysis and manuscript drafting were implemented by S.C. (Sonia Chaabane) with support from K.C., S.D., S.C. (Sohaila Cheema), and R.M. All authors have read and agreed to the published version of the manuscript.

Chaabane, S., Doraiswamy, S., Chaabna, K., Mamtani, R., & Cheema, S. (2021). The impact of covid-19 school closure on child and adolescent health: A rapid systematic review. *Children*, 8(5), 415. https://doi.org/10.3390/children8050415

References

- UNESCO. Education: From Disruption to Recovery. Available online: https://en.unesco.org/covid19/educationresponse (accessed on 30 September 2020).
- Jackson, C.; Mangtani, P.; Hawker, J.; Olowokure, B.; Vynnycky, E. The Effects of School Closures on Influenza Outbreaks and Pandemics: Systematic Review of Simulation Studies. PLoS ONE 2014, 9, e97297. [CrossRef] [PubMed]
- Jackson, C.; Vynnycky, E.; Hawker, J.; Olowokure, B.; Mangtani, P. School closures and influenza: Systematic review of epidemiological studies. BMJ Open 2013, 3. [CrossRef] [PubMed]
- Principi, N.; Esposito, S.; Gasparini, R.; Marchisio, P.; Crovari, P. Burden of influenza in healthy children and their households. Arch. Dis. Child. 2004, 89, 1002–1007. [CrossRef]
- Zhang, J.; Litvinova, M.; Liang, Y.; Wang, Y.; Wang, W.; Zhao, S.; Wu, Q.; Merler, S.; Viboud, C.; Vespignani, A.; et al. Age profile
 of susceptibility, mixing, and social distancing shape the dynamics of the novel coronavirus disease 2019 outbreak in China.
 medRxiv 2020. [CrossRef]
- Heavey, L.; Casey, G.; Kelly, C.; Kelly, D.; McDarby, G. No evidence of secondary transmission of COVID-19 from children attending school in Ireland, 2020. Eurosurveillance 2020, 25, 2000903. [CrossRef] [PubMed]
- Anderson, R.M.; Heesterbeek, H.; Klinkenberg, D.; Hollingsworth, T.D. How will country-based mitigation measures influence the course of the COVID-19 epidemic? Lancet 2020, 395, 931–934. [CrossRef]
- Xu, B.; Kraemer, M.U.G. Open access epidemiological data from the COVID-19 outbreak. Lancet Infect. Dis. 2020, 20, 534.
 [CrossRef]
- Bacete, F.J.G.; Perrin, G.M.; Schneider, B.H.; Blanchard, C. Effects of School on the Well-Being of Children and Adolescents. In Handbook of Child Well-Being: Theories, Methods and Policies in Global Perspective; Ben-Arieh, A., Casas, F., Frønes, I., Korbin, J.E., Eds.; Springer: Dordrecht, The Netherlands, 2014; pp. 1251–1305.
- Kidger, J.; Araya, R.; Donovan, J.; Gunnell, D. The Effect of the School Environment on the Emotional Health of Adolescents: A Systematic Review. Pediatrics 2012, 129, 925–949. [CrossRef]
- Zimmo, L.; Farooq, A.; Almudahka, F.; Ibrahim, I.; Al-Kuwari, M.G. School-time physical activity among Arab elementary school children in Qatar. BMC Pediatr. 2017, 17, 76. [CrossRef]
- Centers for Disease Control and Prevention. Comprehensive School Physical Activity Programs: A Guide for Schools; Centers for Disease Control and Prevention: Atlanta, GA, USA, 2013.

First: Look for an evidence synthesis resources on your research question or topic

Second: Look for scholarly peer-reviewed resources on your research question or topic

Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

What is your research question?

What scholarly databases best mirror you research question?

HLSC: Google Scholar, Embase, Web of Science Core Collection, Web of Science Complete, Web of Science MEDLINE, CINAHL Complete, PsycINFO

CHYS: ProQuest Sociology Collection; PsycINFO; Education Source; ERIC

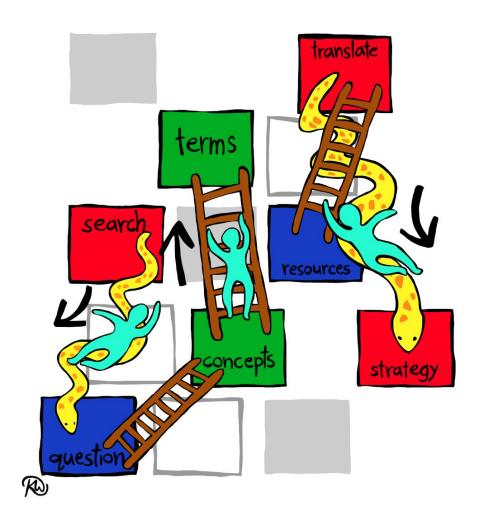
Evidence synthesis: Web of Science Complete, MEDLINE, Embase, Google Scholar Cochrane, OSF Preprints, Prospero, Scopus

HLSC: Google Scholar, Embase, Web of Science Core Collection, Web of Science Complete, Web of Science MEDLINE, CINAHL Complete, PsycINFO

CHYS: ProQuest Sociology Collection; PsycINFO; Education Source; ERIC

Evidence synthesis: Web of Science Complete, MEDLINE, Embase, Google Scholar Cochrane, OSF Preprints, Prospero, Scopus

Searching is a non-linear and potentially iterative process.



Evidence-based search question frameworks:

PICO: Population/problem, Intervention/exposure, Comparison, and Outcome

SPICE: Setting, Perspective, Interest, Comparison, Evaluation

Concepts: Main search concepts

Evidence-based search question frameworks:

PICO: Population/problem, Intervention/exposure, Comparison, and Outcome

P: (Who is the question focused on?)

I: (What behavior or variable is being studied?)

C: (How might I evaluate this issue with a broader context?)

O: (What in relation to this issue do I want to examine?)

Evidence-based search question frameworks:

SPICE: Setting, Perspective, Interest/Intervention/Exposure, Comparison, Evaluation

S: (Setting is the context for the question)

P: (Perspective is the users, potential users, or stakeholders of the service...)

I: (Intervention is the action taken for the users, potential users, or stakeholders...)

C: (Comparison is the alternative actions or outcomes...)

E: (Evaluation is the result of measurement that will determine the success of the intervention...)

Evidence-based search question frameworks:

Main Search Concepts

What are the main search concepts/populations/issue of interest for your rapid review?

Evidence-based search question frameworks:

Main Search Concepts

What are the main search concepts/populations/issue of interest for your rapid review?

- 1. ADHD
- 2. obesity
- 3. children

- 1. ADHD
- 2. obesity
- 3. children
 - 1. ADHD or "attention deficit disorder"

AND

2. Obesity# or obese or "body weight"

AND

3. Children or child* or boy or girl or student*

AND

Databases:

MEDLINE via Web of Science Complete, Embase, Web of Science Core, CINAHL...

Currency of information: 2000+

Language: English

Discipline: Health/Physiology Format: Scholarly articles

zoterobib

Zotero

Language=English; Date=2000+; Format=scholarly peer review articles; Humans

What is another word for obesity?



Need **synonyms for obesity**? Here's a list of **similar words** from our **thesaurus** that you can use instead.

Noun

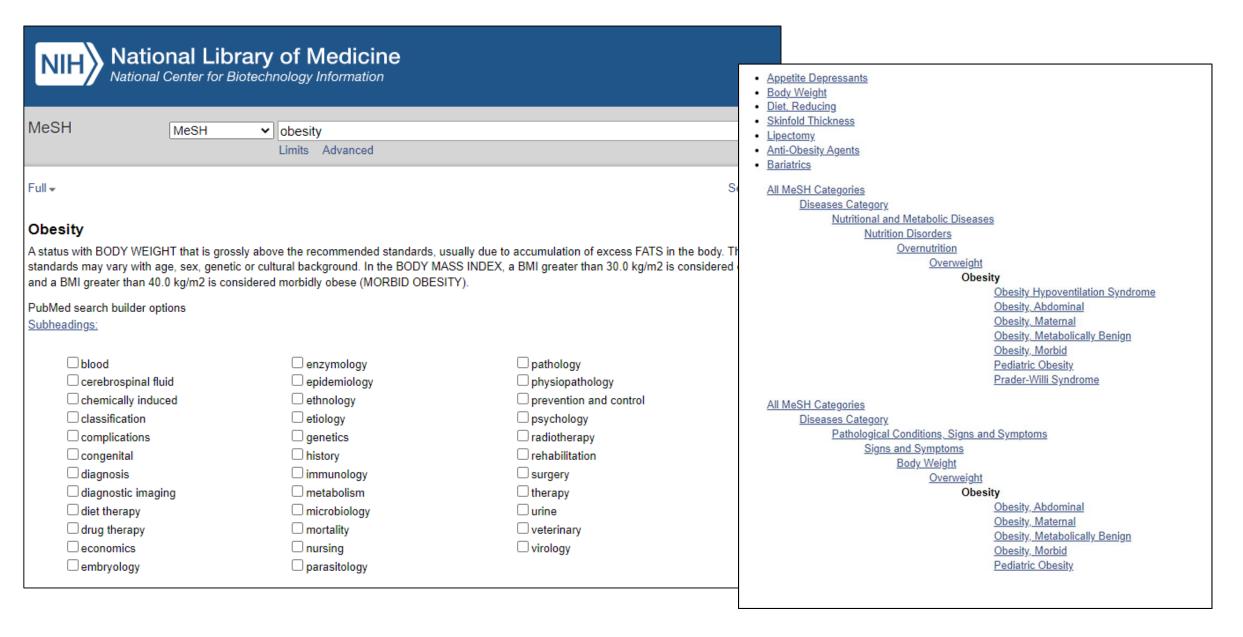
The state of being extremely overweight

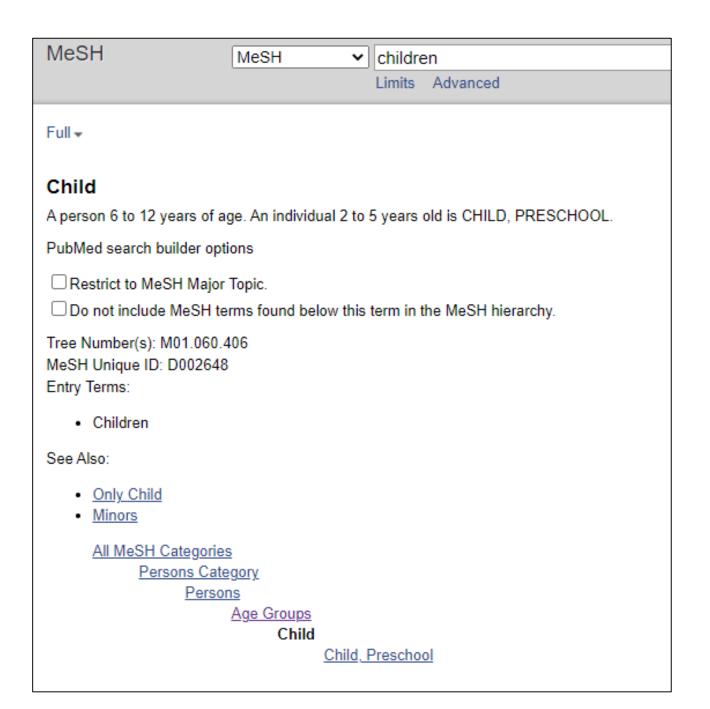




https://www.wordhippo.com/

https://www.ncbi.nlm.nih.gov/mesh





Attention Deficit Disorder with Hyperactivity

A behavior disorder originating in childhood in which the essential features are signs of developmentally inappropriate inattention, impulsivity, and hyperactivity. Although most individuals have symptoms of both inattention and hyperactivity-impulsivity, one or the other pattern may be predominant. The disorder is more frequent in males than females. Onset is in childhood. Symptoms often attenuate during late adolescence although a minority experience the full complement of symptoms into mid-adulthood. (From DSM-V)

Year introduced: 1984

Entry Terms:

- · Attention Deficit Disorders with Hyperactivity
- ADHD
- · Attention Deficit Hyperactivity Disorder
- · Hyperkinetic Syndrome
- · Syndromes, Hyperkinetic
- · Attention Deficit-Hyperactivity Disorder
- · Attention Deficit-Hyperactivity Disorders
- · Deficit-Hyperactivity Disorder, Attention
- · Deficit-Hyperactivity Disorders, Attention
- · Disorder, Attention Deficit-Hyperactivity
- · Disorders, Attention Deficit-Hyperactivity
- ADDH
- · Attention Deficit Hyperactivity Disorders
- · Attention Deficit Disorder
- · Attention Deficit Disorders
- · Deficit Disorder, Attention
- · Deficit Disorders, Attention
- · Disorder, Attention Deficit
- · Disorders, Attention Deficit
- · Brain Dysfunction, Minimal
- · Dysfunction, Minimal Brain
- · Minimal Brain Dysfunction

Previous Indexing:

Brain Damage, Chronic (1966-1968)

All MeSH Categories

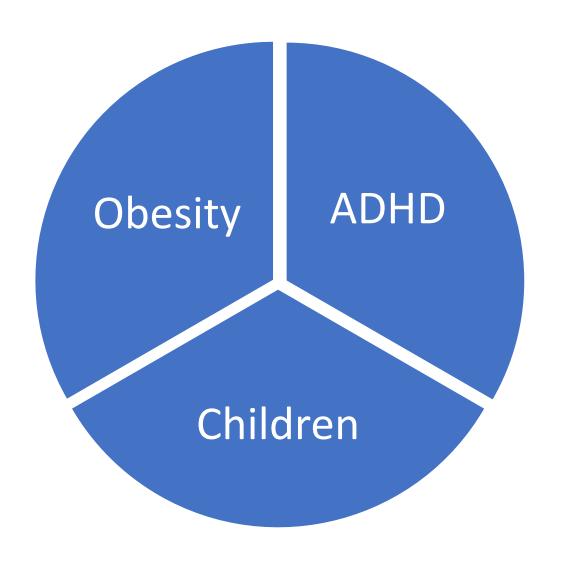
Psychiatry and Psychology Category

Mental Disorders

Neurodevelopmental Disorders

Attention Deficit and Disruptive Behavior Disorders

Attention Deficit Disorder with Hyperactivity



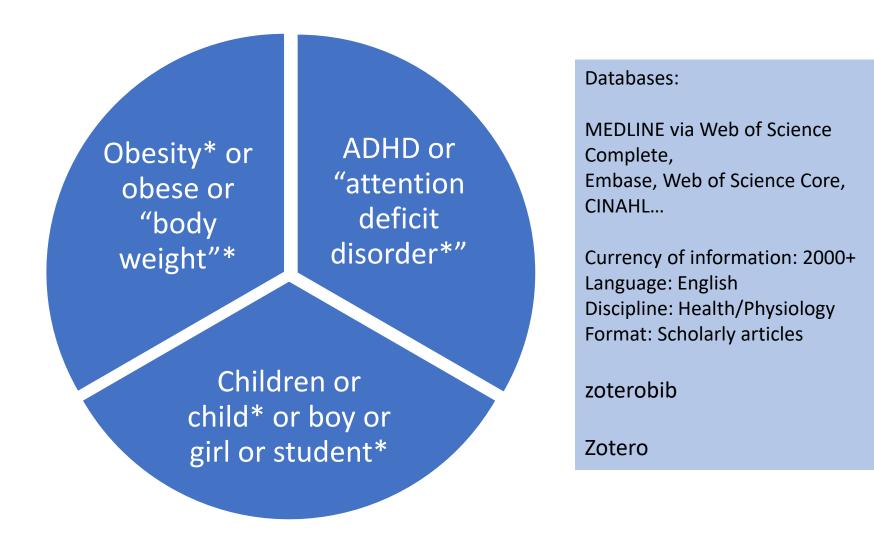
Databases

Currency of information

Language

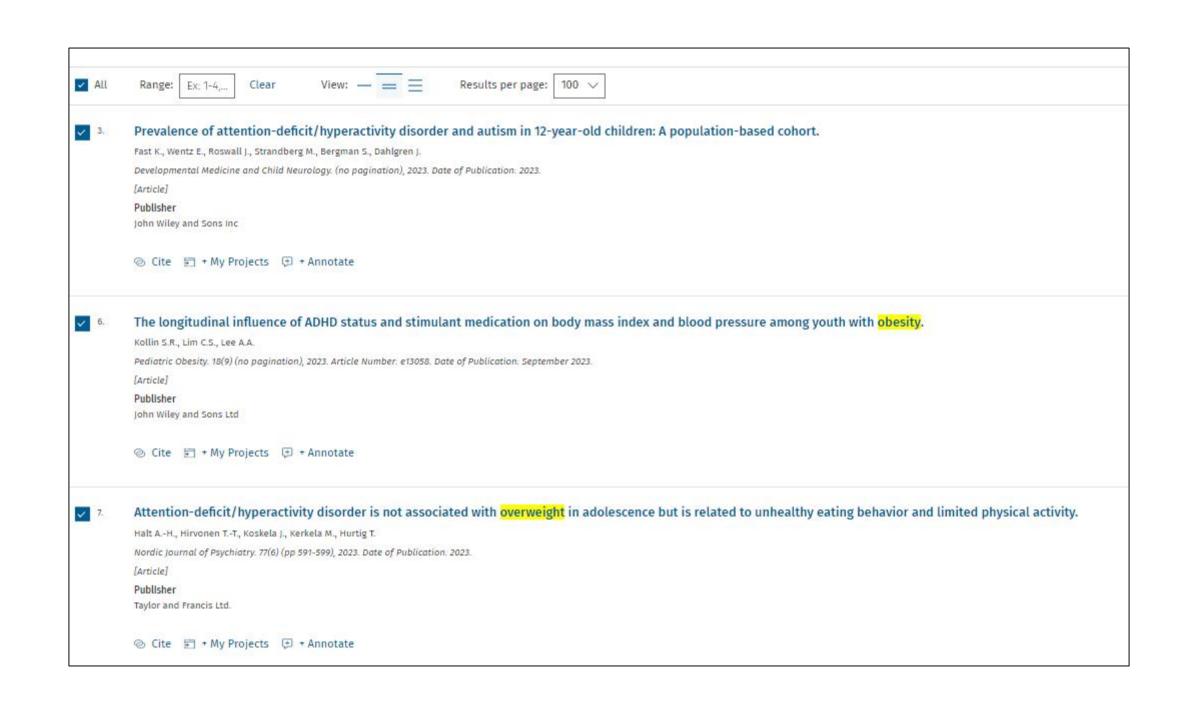
Discipline

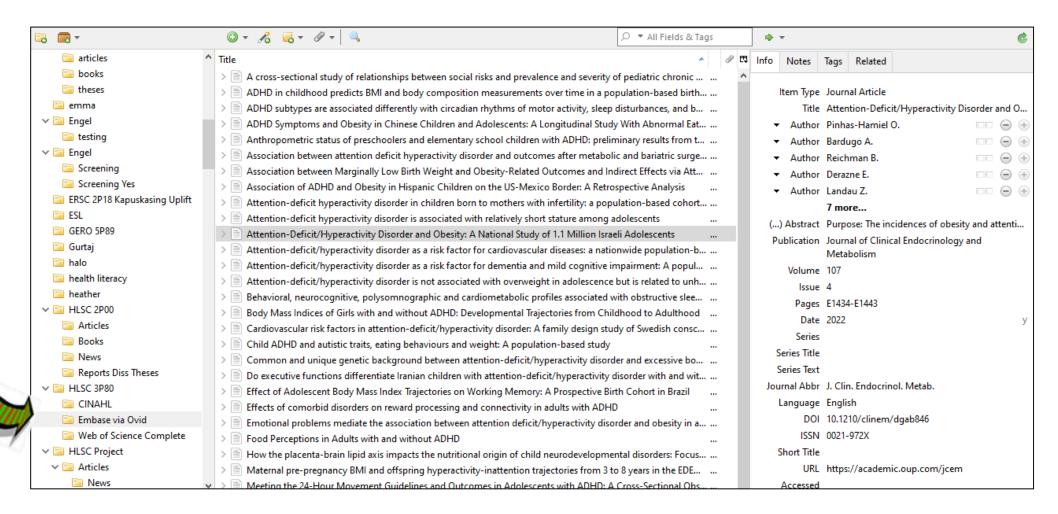
Format



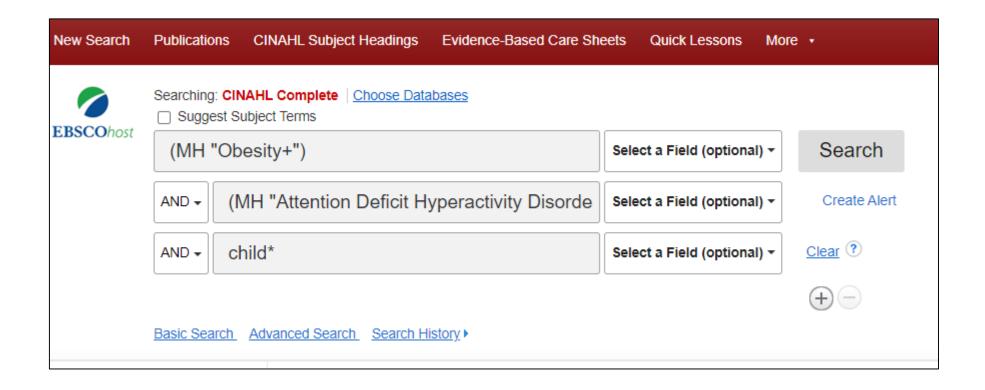
Embase via Ovid

☐ # ▲ Searches					
1 *obesity/ or abdominal obesity/ or adolescent obesity/ or diabetic obesity/ or	genetic obesity disorder/ or morbid obesity/ or normal we	ight obesity/			
2 (obese or obesity or overweight).ti,ab,kw.					
3 *attention deficit hyperactivity disorder/					
4 1 or 2	Results	Type	Actions		
5 3 and 4		255683	Advanced	Display Results	More ∨
6 limit 5 to (human and english language)		605946	Advanced	Display Results	More 🗸
7 limit 6 to yr="2000 -Current"					
Save Remove Combine with: AND OR		4755	Advanced	Display Results	More V
Save All Edit Create RSS Create Auto-Alert View Saved	636226	Advanced	Display Results	More ∨	
		80	Advanced	Display Results	More ∨
Basic Search Find Citation Search Tools Search Fields Advance	ed Search Multi-Field Search	77	Advanced	Display Results	More ∨
1 resource selected Hide Change (I) Embase, 1974 to 2023 October 11	77	Advanced	Display Results	More 🗸	
Save All Edit Create RSS Create Auto-Alert View Saved Basic Search Find Citation Search Tools Search Fields Advanced Search Multi-Field Search 1 resource selected Hide Change 255683 Advanced Display Results More 255683 Advanced Display Results More 4755 Advanced Display Results More 605946 Advanced Display Results More 4755 Advanced Display Results More 80 Advanced Display Results More 77 Advanced Display Results More 178 Advanced Display Results More 80 Advanced Display Results More 179 Advanced Display Results More 180 Advanced Display Resu					
Keyword					
Enter keyword or phrase (* or \$ for truncation)					
The state of the s					





CINAHL Complete via EBSCOhost



Limited by age, source type, language and date

Relevance ▼ Page Options ▼ Share ▼ Search Results: 1 - 50 of 150

1. The Environmental Influences on **Child** Health Outcomes (ECHO)-Wide Cohort.







Academic Journal

(includes abstract) Knapp, Emily A; Kress, Amii M; Parker, Corette B; Page, Grier P; McArthur, Kristen; Gachigi, Kennedy K; Alshawabkeh, Akram N; Aschner, Judy L; Bastain, Theresa M; Breton, Carrie V; Bendixsen, Casper G; Brennan, Patricia A; Bush, Nicole R; Buss, Claudia; Camargo, Carlos A; Catellier, Diane; Cordero, José F; Croen, Lisa; Dabelea, Dana; Deoni, Sean American Journal of Epidemiology, Aug2023; 192(8): 1249-1263. 15p. (Journal Article - research, tables/charts) ISSN: 0002-9262

Find Full Text

2. Psychiatric comorbidity associated with weight status in 9 to 10 year old children.







Academic Journal

(includes abstract) Smith, Kathryn E.; Mason, Tyler B. Pediatric Obesity, May2022; 17(5): 1-6. 6p. (Journal Article - research, tables/charts) ISSN: 2047-6302

HTML Full Text DDF Full Text 🕟 Save PDF to Cloud

3 Mental Health and Cognitive Development in Symptomatic Children and Adolescents Scoring High on Habitual Snoring: Role of Obesity and Allergy.



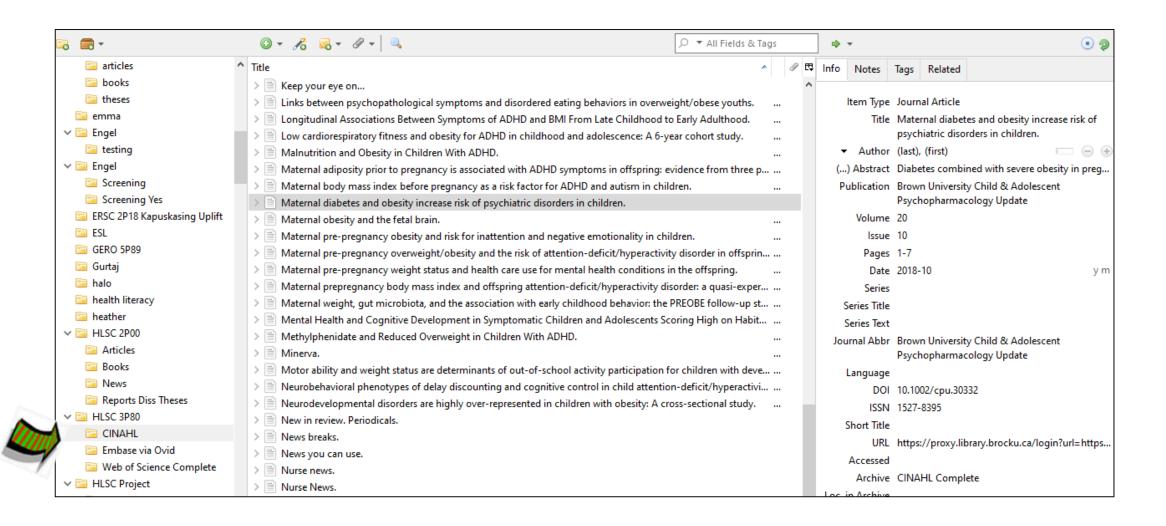


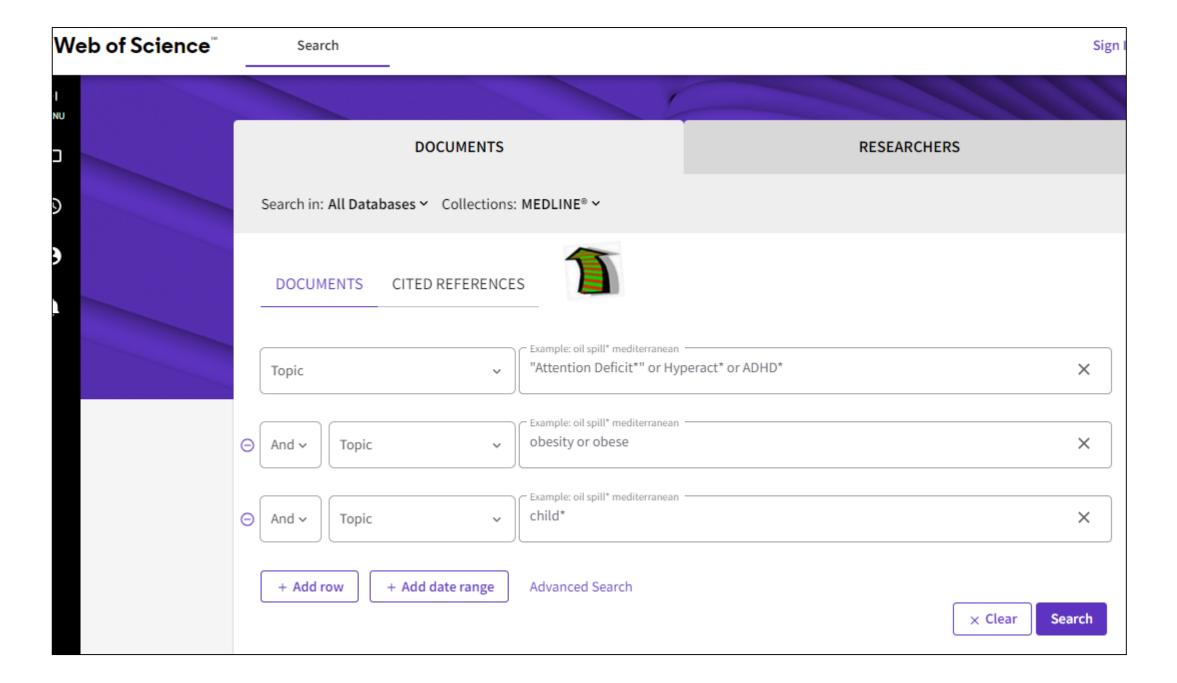


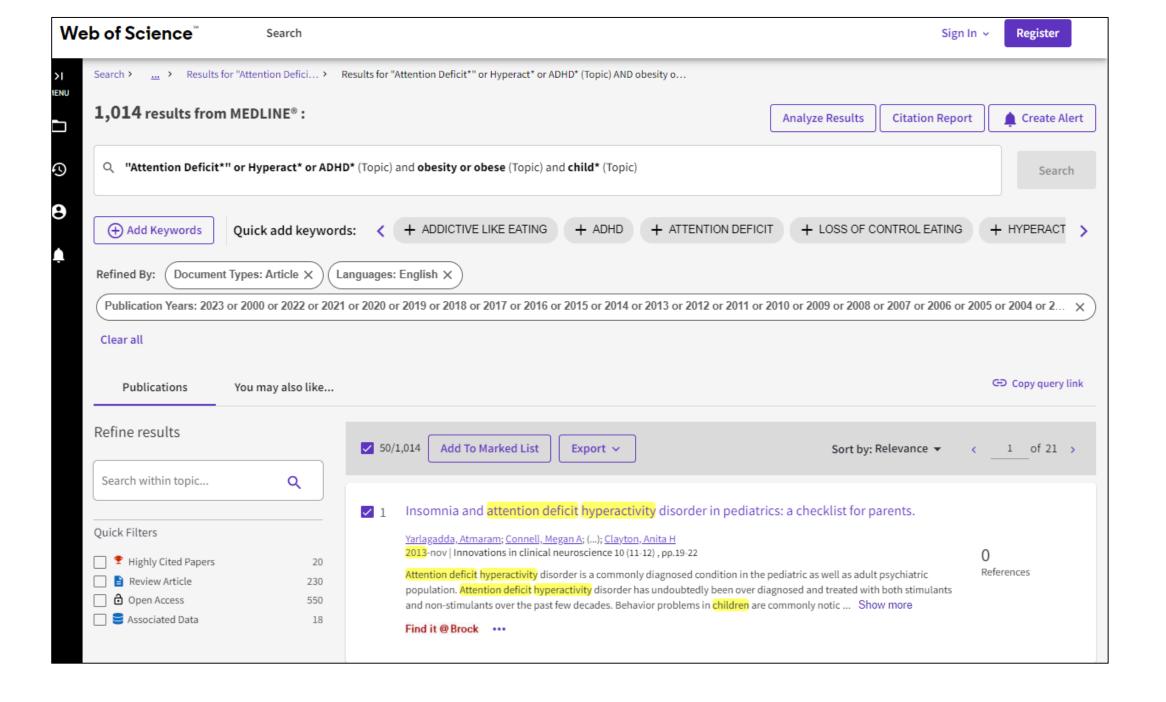
Academic Journal

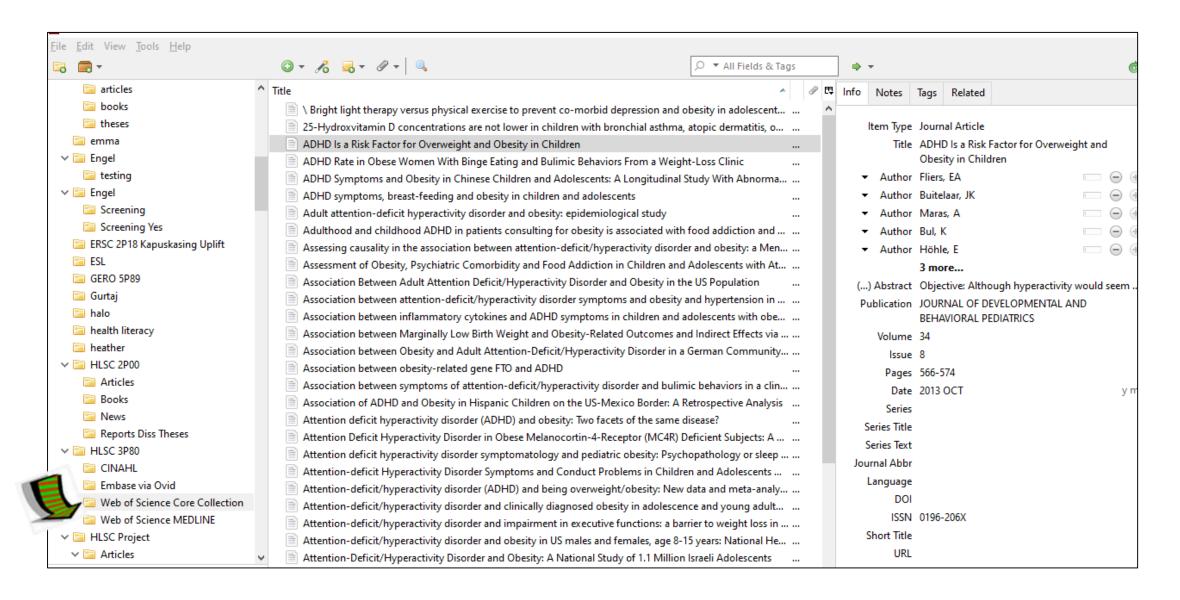
(includes abstract) Zaffanello, Marco; Pietrobelli, Angelo; Zoccante, Leonardo; Ferrante, Giuliana; Tenero, Laura; Piazza, Michele; Ciceri, Marco Luigi; Nosetti, Luana; Piacentini, Giorgio Children, Jul2023; 10(7): 1183. 16p. (Journal Article - research, tables/charts) ISSN: 2227-9067

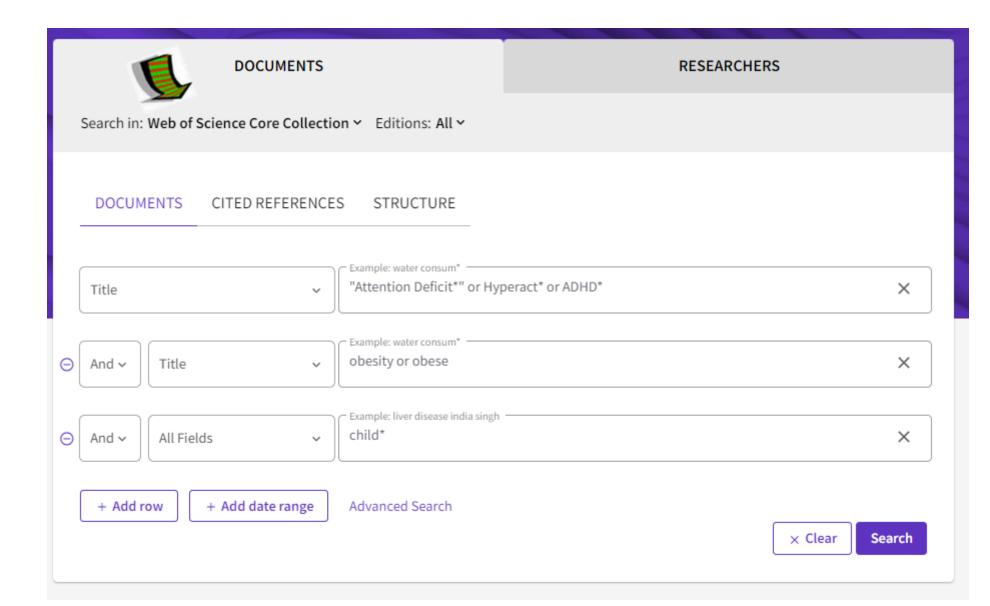
Find Full Text

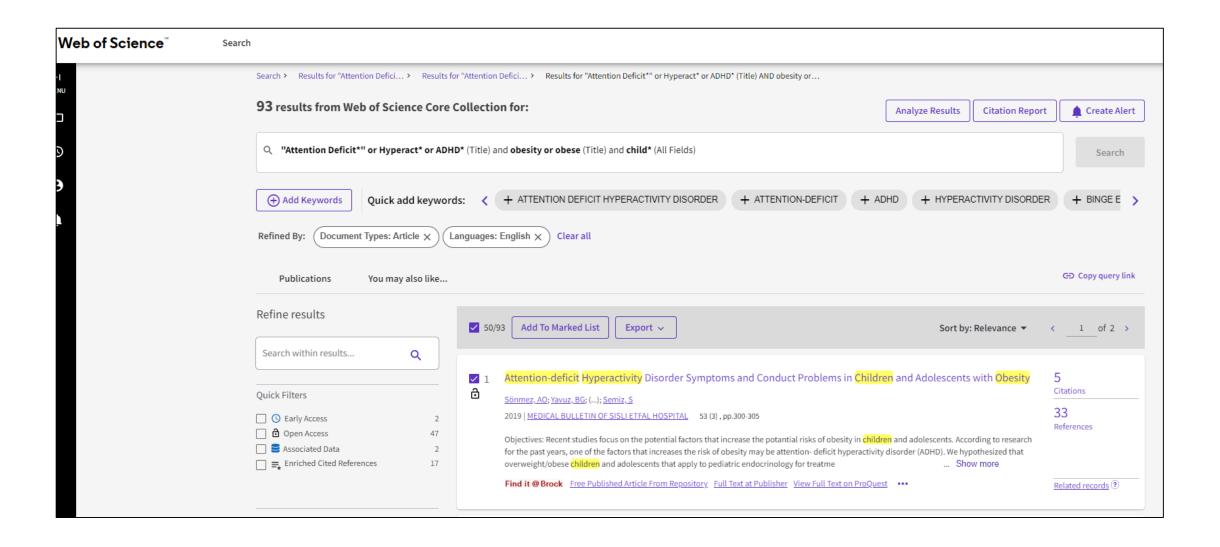


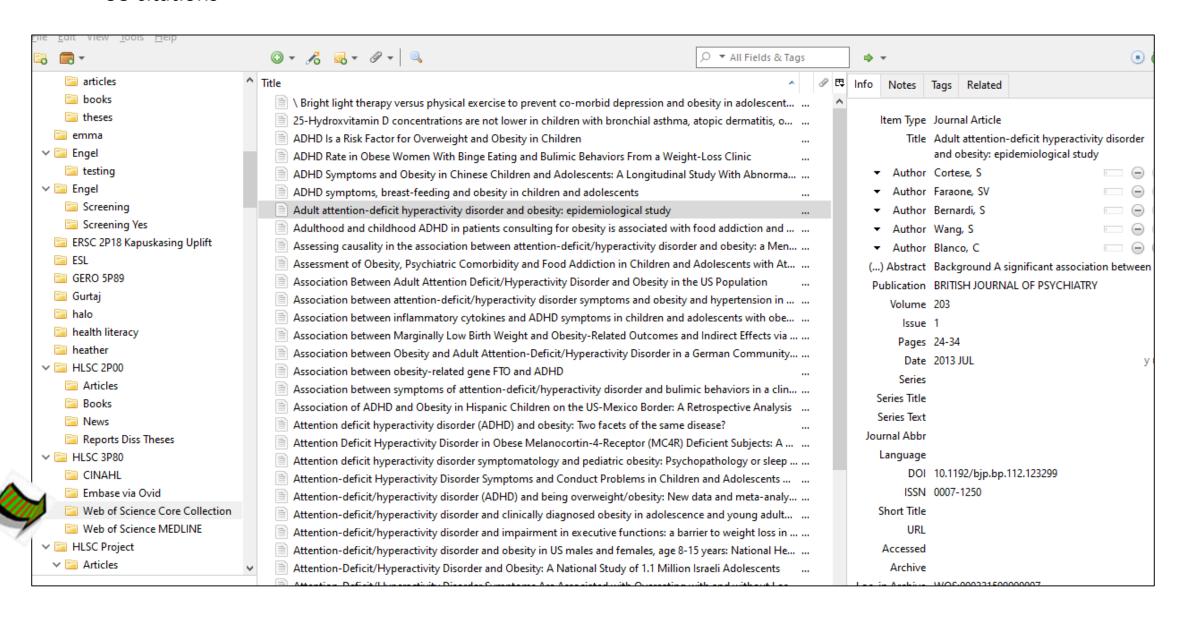




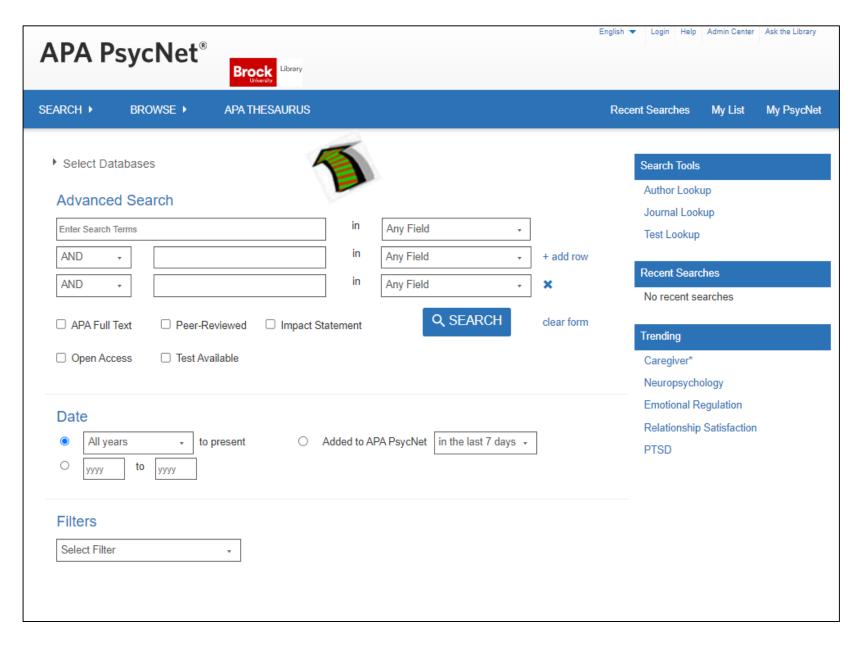




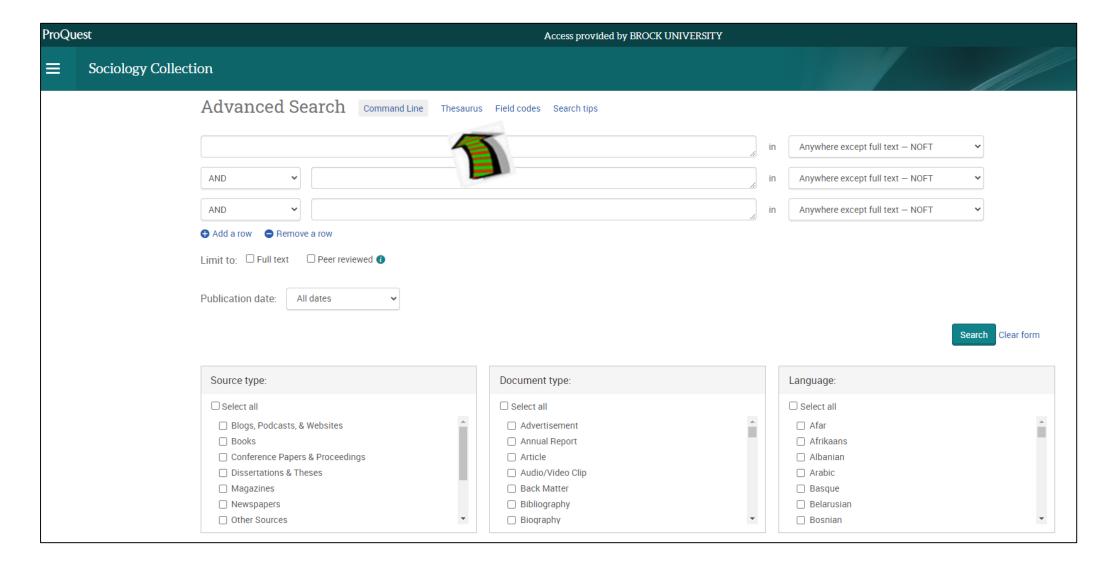




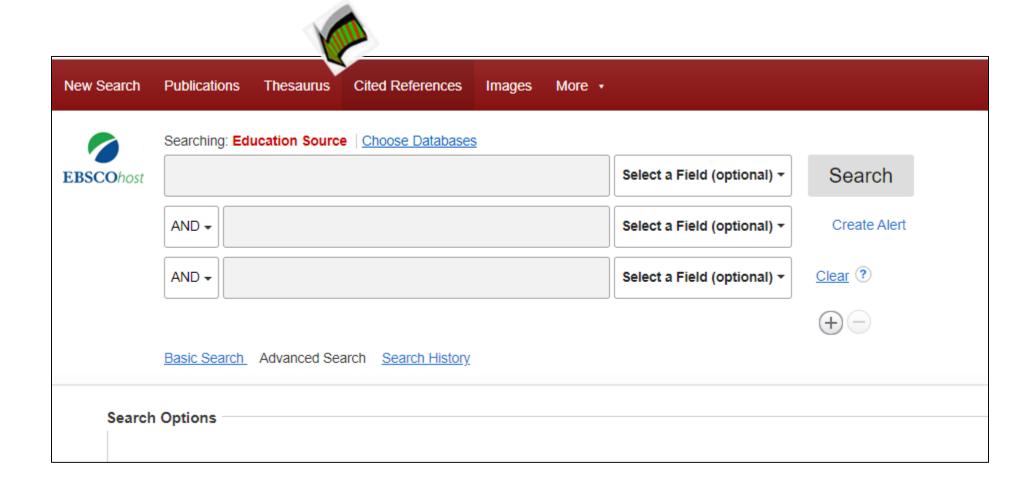
PsycINFO database

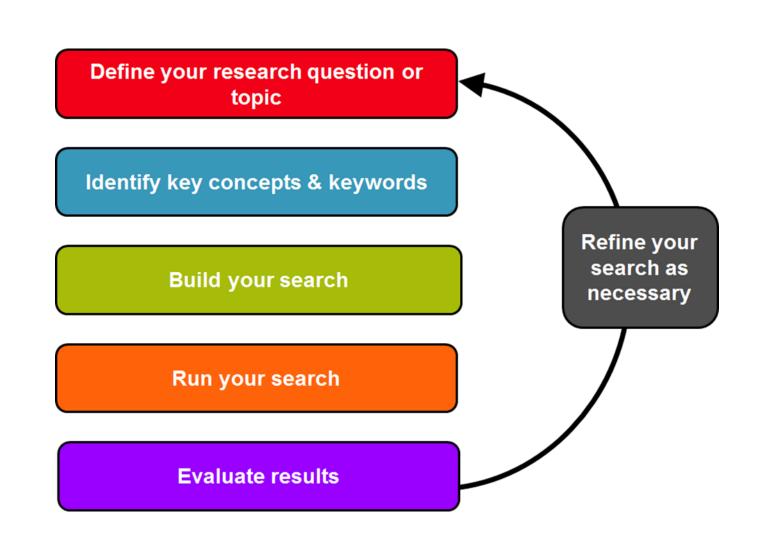


ProQuest Sociology database



Education Source database





Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science	1014
CINAHL	150
Web of Science Core Collection	93
Embase via Ovid	<u>49</u>
	1306

Is ADHD associated with increased risk of obesity in children?

Screening criteria

Inclusion

scholarly articles

date: 2000+

language: English

population: Children 6-12

Humans

Exclusion

study design e.g. random trials

outcome/health indicators e.g. physiology

types of data e.g. BMI

wrong population, adolescents+

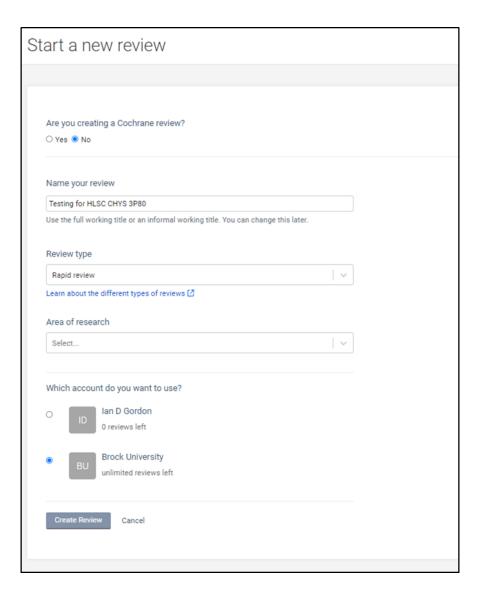


Covidence @

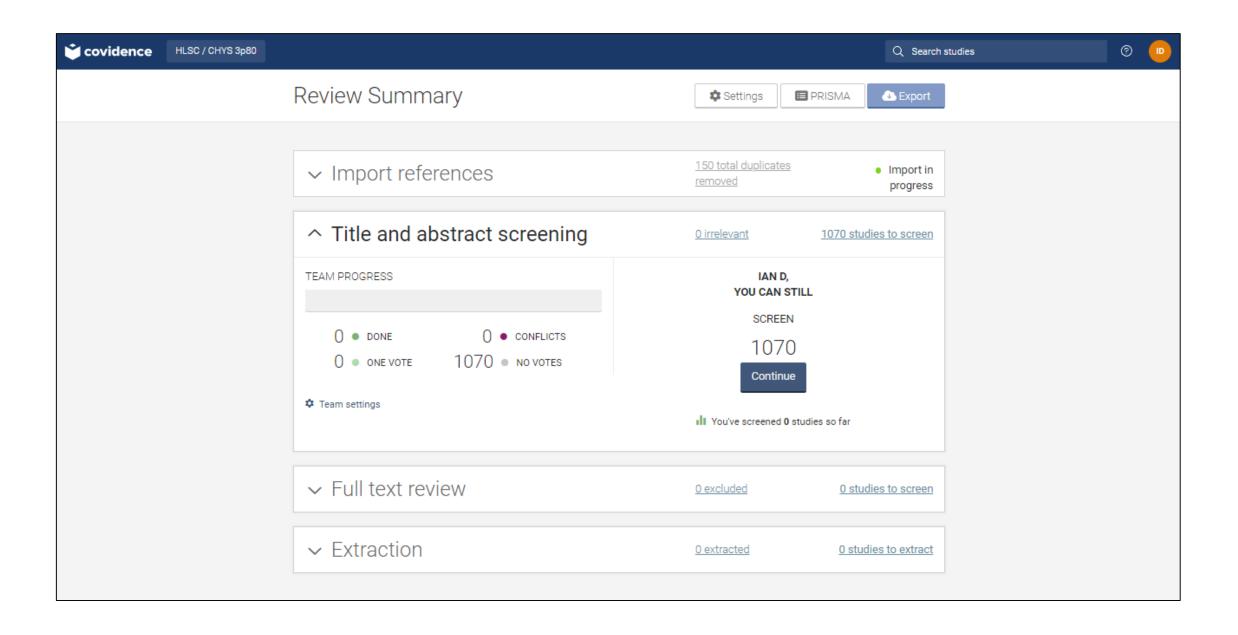


- This web-based software platform streamlines systematic reviews and other research reviews that require screening citations title and abstract and/or full text — assessing risk of bias, or and extracting study characteristics and outcomes.
- Users must create an account to utilize Brock's access to this tool.
- Find help and answers to FAQs in Covidence's online knowledge base.

more info...







Covidence database screening

#59 - Singh 2013 Health, Chronic Conditions, and Behavioral Risk Disparities Among U.S. Immigrant Children and Adolescents. Maybe Singh, Gopal K.; Yu, Stella M.; Kogan, Michael D. Public Health Reports 2013;128(6):463-479 2013 Yes ▼ Abstract Objective. We examined differentials in the prevalence of 23 parent-reported health, chronic condition, and behavioral indicators among 91,532 children of immigrant and U.S.-born parents. Methods. We used the 2007 National Survey of Children's Health to estimate health differentials among 10 ethnicnativity groups. Logistic regression yielded adjusted differentials. Results. Immigrant children in each racial/ethnic group had a lower prevalence of depression and behavioral problems than native-born children. The prevalence of autism varied from 0.3% among immigrant Asian children to 1.3%--1.4% among native-born non-Hispanic white and Hispanic children. Immigrant children had a lower prevalence of asthma, attention deficit disorder/attention deficit hyperactivity disorder; developmental delay; learning disability; speech, hearing, and sleep problems; school absence; and ≥1 chronic condition than native-born children, with health risks increasing markedly in relation to mother's's duration of residence in the U.S. Immigrant children had a substantially lower exposure to environmental tobacco smoke, with the odds of exposure being 60%--95% lower among immigrant non-Hispanic black, Asian, and Hispanic children compared with native non-Hispanic white children. Obesity prevalence ranged from 7.7% for native-born Asian children to 24.9%-25.1% for immigrant Hispanic and native-born non-Hispanic black children. Immigrant children had higher physical inactivity levels than native-born children; however, inactivity rates declined with each successive generation of immigrants. Immigrant Hispanic children were at increased risk of obesity and sedentary behaviors. Ethnic-nativity differentials in health and behavioral indicators remained marked after covariate adjustment. Conclusions. Immigrant patterns in child health and health-risk behaviors vary substantially by ethnicity, generational status, and length of time since immigration. Public health programs must target at-risk children of both immigrant and U.S.-born parents. ■ Note

■ History

■ Duplicate

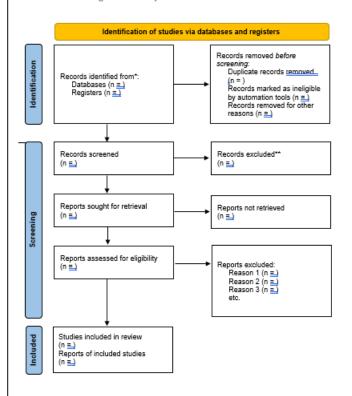
■ Du

Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science	1014
CINAHL	150
Web of Science Core Collection	93
Embase via Ovid	<u>49</u>
	1306
Covidence duplicates removed	150
Covidence rapid review full text screening	1070
Final set	??

PRISMA 2020 Word flow chart generator

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only

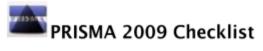


*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuxt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmi.n71

For more information, visit: http://www.prisma-statement.org/



Section/topic	#	Checklist item	Pg		
ITLE (+ Format/Style (Guideli	nes [as per above] /10)			
Title	1	Identify the report as a systematic review, meta-analysis, or both. – Your paper is to be a Rapid Review. Create a title specific to your paper (be creative!) and include in the title that it is a Rapid Review.			
ABSTRACT /10	•				
Structured summary	2	Provide a structured summary including, <u>as applicable</u> : background; objectives; data sources; study eligibility criteria, participants, and interventions (may not apply); study appraisal and synthesis methods ; results; limitations; conclusions and implications of key findings; systematic review registration number. A 'structured summary' means an Abstract with subtitles (e.g., Background, Objectives, Methods, Results, Conclusions)			
INTRODUCTION /10					
Rationale	3	Describe the rationale for the review in the context of what is already known. (e.g., why is the review needed for your research question? Why is the topic important? Note: you can draw on sources other than articles included in your review for introduction material, if needed [they must still be appropriate sources and referenced appropriately]) You likely have some of this component from your research proposal.			
Objectives	Provide an explicit statement of questions being addressed with reference to participants, interventions (or exposure, if no intervention), comparisons, outcomes, and study design (PICOS). (i.e., this part is to conduct a rapid review of the literature on your research question – state your research question)				
METHODS /30		Methods will be outlining how you will do or did the Review.			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. Not applicable.			
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale for the criteria used. What types of studies are you going to include or not include?			
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. What are you searching and what was the last date that you searched these sources? (ie what databases? Hand searching of reference lists? etc)			
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. (i.e., indicate your search string)			
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta analysis). (ie how did you screen studies that resulted from the search to determine which me your eligibility criteria and to come to the ones that are included in your review?)			



PRISMA 2009 Checklist

Section/topic	# Checklist item						
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. (this component would typically have 2 or more individuals independently searching and sometime includes contacting investigators – yours will not, so it's fairly simple)					
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. (i.e., what results, variables, and/or study characteristics are you pulling from the articles to report? [eg in your table])					
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. (i.e. how will you assess the risk of bias in the studies? consider biases related to study design, sample/recruitment procedures, generalizability of sample, group assignment [randomization, blinding], measurement biases, confounding, funding, length of follow-up, etc.]					
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).					
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I ²) for each meta analysis.					
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies, language bias, etc.).					
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.					
Results are now what you	four	low diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper). In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper). In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper). In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper). In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).					
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram . (Results of your search – how many results, how many screened, how many excluded and way, etc. You must include a flow diagram, and outline this in your written discussion).					
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. (ie what do the studies look like that you included in the review? Include Table AND describe in writing)					
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). (assess each study for risk of bias – see item 12 methods for examples to consider; describe strengths/limitations of individual studies and commonalities in these individual study risk of biases across them)					
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. (ie what did the studies find in answer to your research question?)					
Synthesis of results	21	Present results of each meta analysis done, including confidence intervals and measures of consistency.					



PRISMA 2009 Checklist

Risk of bias across	22	Present results of any assessment of risk of bias across studies (see Item 15 for examples; why might the results of your group				
studies		of articles be biased? Are certainly results more likely to be included?)				
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).				
DISCUSSION /15 (e.g., a	inswe	r to your research question; overall main conclusions and limitations or gaps identified in research reviewed; next steps/future				
research; limitations of y	our ra	apid review)				
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). (overall – what did your rapid review find? What doe these studies say in answer to your research question? And what is the strength of this evidence available? What is the relevance – ie what do these results mean to those who could use this evidence?)				
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). (i.e., limitations overall of the studies that you reviewed, AND potential limitations of your rapid review – think about if/how our rapid review might have missed key evidence and why? Think about what makes a rapid review 'rapid' relative to a Systematic Review?)				
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research. (sum up what the evidence says and means; what are implications for future research based on limitations identified in the research)				
FUNDING						
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.				

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.

Citation	Study characteristic 1	Study characteristic 2	Study characteristic 3	Risk of Bias	
Dell'Agnello, G., Maschietto, D., Bravaccio, C., Calamoneri, F., Masi, G., Curatolo, P., Besana, D., Mancini, F., Rossi, A., Poole, L., Escobar, R., Zuddas, A., & LYCY Study Grp. (2009). Atomoxetine hydrochloride in the treatment of children and adolescents with attention-deficit/hyperactivity disorder and comorbid oppositional defiant disorder: A placebo-controlled Italian study. EUROPEAN NEUROPSYCHOPHARMACOLOGY, 19(11), 822–834					
Granato, M. F., Ferraro, A. A., Lellis, D. M., & Casella, E. B. (2018). Associations between Attention-Deficit Hyperactivity Disorder (ADHD) Treatment and Patient Nutritional Status and Height. Behavioural Neurology, 2018, 7341529–7341529.					
Guner, S., Uneri, O., Sekmen, E., Goker, Z., Cop, E., & Hekim, O. (2021). Assessment of Obesity, Psychiatric Comorbidity and Food Addiction in Children and Adolescents with Attention Deficit and Hyperactivity Disorder. PSYCHIATRY AND BEHAVIORAL SCIENCES, 11(2), 104–114					
Yim, G., Roberts, A., Ascheria, A., Wxpii, D., Kigumgurtzoglou, M., & Weisskopf, M. (2021). Association Between Periconceptional Weight of Maternal Grandmothers and					

What bias was introduced to your rapid review?



Man sitting near table with laptop photo by <u>Joseph Frank</u> on <u>Unsplash</u>

TIPS

- Read through the HLSC / CHYS and Evidence Synthesis library research guides
- Experiment testing possible databases with your search strategies
- Think like the database you are searching e.g. MeSH term equivalents
- Look for a YouTube video for your database, process or software
- No need to use Covidence software for deduping or screening
- Start early searching and evaluating resources is an iterative process
- Invest in using zoterobib and Zotero citation management software
- Follow course assignment guidelines and instructions
- Some digital resources work best on- vs. off-campus access
- Lean on colleagues when appropriate
- Book a consultation if needed

Library Seminar Agenda

- Top 10 resources you should know about!
- Evidence synthesis 101 Rapid Reviews
- Brock Library Systematic Reviews & Evidence Syntheses Library Research Guide
- Brock Library HLSC/CHYS Library Research Guides
- Scholarly databases lots of them!
- Being a competent searcher/researcher
- Where, how and when to get help

Where can I get help with seeking information?

Brock Library Evidence Synthesis Research Guide https://researchguides.library.brocku.ca/systematicreviews

Brock Library HLSC/CHYS Research Guides https://brocku.ca/library/

Email the Library

libhelp@brocku.ca

Ask Us Chat service https://brocku.ca/library/chat/



Book a Consultation

https://calendar.library.brocku.ca/appointments/researchconsultation

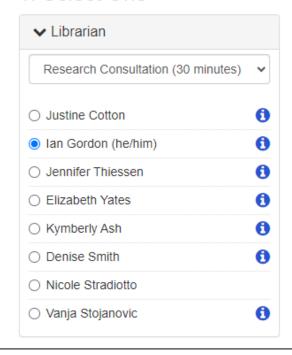
Brock University / Appointments

Make an Appointment Research Consultation

Your Librarian can help you:

- · use the best search tools for your assignments
- · find information sources on your specific topic
- · develop effective research strategies
- · become a confident and independent researcher

1. Select One



2. Select Date:



3. Select Time:

Thursday, November 16, 2023

Time Zone: Eastern Time - US & Canada (change)



Continue



Ian Gordon

Teaching & Learning Librarian igordon@brocku.ca